## Swaziland



Demographic and Health Survey

# Swaziland Demographic and Health Survey 2006-07 

Central Statistical Office<br>Mbabane, Swaziland

Macro International Inc.
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## PREFACE

This detailed report presents the major findings of the 2006-07 Swaziland Demographic and Health Survey (2006-07 SDHS). The 2006-07 SDHS is the first survey of its kind to be undertaken in Swaziland. It was a nationwide survey aimed at generating estimates at the country level, regional level, and for urban and rural areas. The survey was commissioned by the Ministry of Health and Social Welfare and implemented by the Central Statistical Office. Fieldwork was carried out between July 2006 and March 2007.

The primary objective of the 2006-07 SDHS was to collect up-to-date information for policymakers, planners, researchers, and programme managers that would provide guidance in the planning, implementation, monitoring and evaluation of population and health programmes in Swaziland. Specifically, the 2006-07 SDHS collected information on fertility levels, marriage, sexual activity, fertility preferences, awareness and use of family planning methods, breastfeeding practices, nutritional status of women and young children, childhood and maternal mortality, care and protection of youth, and awareness and behaviour regarding HIV/AIDS and other sexually transmitted infections (STIs). In addition, it collected information on malaria, the use of mosquito nets, and the prevalence of HIV in the population age two years and above.

I would like to acknowledge the efforts of a number of organizations that contributed immensely to the success of the survey. First, I would like to acknowledge the financial assistance from the Government of Swaziland, the United Nations Joint Programme on HIV/AIDS (UNAIDS), the National Emergency Response Council on HIV/AIDS (NERCHA), the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA), the U.S. Centers for Disease Control (CDC) and Prevention, which channeled its support through Population Services International (PSI), the Swaziland National AIDS Programme (SNAP), HIV/AIDS Prevention and Care (HAPAC), the World Health Organisation (WHO), and Italian Co-operation. Secondly, in the area of technical backstopping, I would like to acknowledge Macro International Inc. and the Global Clinical Viral laboratory.

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Isabella Hlophe
Director of Statistics

## SUMMARY OF FINDINGS

The 2006-07 Swaziland Demographic and Health Survey (SDHS) is a nationally representative survey of 4,843 households, 4,987 women age 15-49, and 4,156 men age 15-49. The SDHS also included individual interviews with boys and girls age 12-14 and older adults age 50 and over. The survey of persons age 12-14 and age 50 and over was carried out in every other household selected in the SDHS. Interviews were completed for 459 girls and 411 boys age $12-14$, and 661 women and 456 men age 50 and over.

The 2006-07 SDHS is the first national survey conducted in Swaziland as part of the Demographic and Health Surveys (DHS) programme. The data are intended to furnish programme managers and policymakers with detailed information on levels and trends in fertility; nuptiality; sexual activity; fertility preferences; awareness and use of family planning methods; breastfeeding practices; nutritional status of mothers and young children; early childhood mortality and maternal mortality; maternal and child health; and awareness and behaviour regarding HIV/AIDS and other sexually transmitted infections. The survey also collected information on malaria prevention and treatment.

The 2006-07 SDHS is the first nationwide survey in Swaziland to provide population-based prevalence estimates for anaemia and HIV. Children age 6 months and older as well as adults were tested for anaemia. Children age 2 years and older as well as adults were tested for HIV.

## Fertility

Fertility in Swaziland has been declining rapidly, with the TFR falling from 6.4 births per woman in 1986 to 3.8 births at the time of the SDHS. As expected, fertility is higher in rural areas ( 4.2 births per woman) than in urban areas ( 3.0 births per woman). Fertility differentials by
education and wealth are substantial. Women with no education have on average 4.9 children compared with 2.4 children for women with tertiary education. Fertility varies widely according to household wealth. Women in the highest wealth quintile have 2.9 children fewer than women in the lowest quintile (2.6 and 5.5 births per woman, respectively).

Unplanned pregnancies remain common in Swaziland, despite the falling fertility. Overall, 37 percent of births are unwanted, while 27 percent are mistimed (wanted later). If all unwanted births were prevented, women would have an average of 2.1 children compared with the actual average of 3.8 children.

While marriage and cohabitation are generally considered to be primary indicators of regular exposure to the risk of pregnancy, many women in Swaziland bear children before entering a stable union. Marriage occurs comparatively late in Swaziland. Only 23 percent of women and 7 percent of men marry before age 20. Around one-quarter of women and one-third of men age 30-34 have not yet married.

Initiating sexual activity before marriage is common in Swaziland. Half of women age 20-49 had first sexual intercourse by age 18, and more than 70 percent were sexually active by age 20 . While men generally initiate sexual activity at a later age than women, 31 percent of men age 20-49 had first sexual intercourse before age 18, and 57 percent were sexually active by age 20 .

The 2006-07 SDHS shows that 18 percent of currently married women are in a polygynous union, i.e., their husband has more than one wife. Older women are more likely to be in a polygynous union than younger women. Polygyny is about twice as prevalent in rural areas as in urban areas. Regional variation is substantial, with Lubombo having the highest proportion of women in polygynous marriages (23 percent) and Manzini having the lowest proportion (15 percent).

## Family Planning

Knowledge of family planning is universal in Swaziland. The most widely known method is the male condom (99 percent for both males and females). Among women, other widely known methods include injectables (96 percent), the pill (95 percent), and the female condom (91 percent). For men, the best known methods besides the male condom are the female condom (94 percent) and the pill and injectables (84 percent each).

More than half (51 percent) of currently married women in Swaziland are using a method of contraception ; most of them use a modern method (48 percent). Contraceptive use among sexually active unmarried women (65 percent) is higher than that among married women, primarily because of the greater use of the male condom.

Government-sponsored facilities remain the chief providers of contraceptive methods in Swaziland (45 percent), while 14 percent are supplied through private medical sources, 9 percent through missions, 9 percent through nongovernment organisations (NGOs), and 18 percent through other private sources (e.g., shops). The most common single source of contraceptive methods in Swaziland is PHU/clinics, which supply about one-quarter of users of modern methods (25 percent). Shops supply 15 percent of users, followed by government hospitals (9 percent).

Unmet need for family planning among currently married women is 24 percent. If all married women with an unmet need for family planning were to use a contraceptive method, the contraceptive prevalence rate in Swaziland would increase from the current level of 51 percent to 75 percent.

## Child Health

Children are considered fully vaccinated when they receive one dose of BCG vaccine, three doses each of DPT and polio vaccines, and one dose of measles vaccine. BCG coverage among children age 12-23 months is nearly uni-
versal (97 percent); coverage is also high for the first doses of DPT (96 percent) and polio (97 percent). The proportion of children receiving subsequent doses of DPT and polio vaccines drops slightly, with 92 percent of children receiving the third dose of DPT and 87 percent receiving the third dose of polio. Ninety-two percent of children had received a measles vaccination by the time of the SDHS. Overall, 82 percent of children age $12-23$ months are fully immunised.

In the two weeks prior to SDHS, 8 percent of children under age five experienced symptoms of ARI, and 28 percent had a fever. Diarrhoea was a more prevalent problem among young children than fever; 13 percent of children under age five had diarrhoea in the two weeks preceding the survey. More than 70 percent of children with diarrhoea were taken to a health provider. Nine in ten children with diarrhoea were treated with some type of oral rehydration therapy (ORT), and 26 percent were given increased fluids. Only 6 percent of children with diarrhoea did not receive any treatment at all.

Data from the 2006-07 SDHS indicate that for the most recent five-year period preceding the survey, the under-five mortality rate was 120 deaths per 1,000 live births. This means that one in every seven children born in Swaziland dies before reaching the fifth birthday. The infant mortality rate is 85 per 1,000 . One-quarter of all infant deaths take place in the neonatal period, that is, during the first month of life.

## Maternal Health

In Swaziland, almost all women who had a live birth in the five years preceding the survey received antenatal care from health professionals (97 percent); 9 percent received care from a doctor, and 88 percent received care from a trained nurse or midwife. Only 3 percent of mothers did not receive any antenatal care.

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus. Seventy-five percent of last-born children born during the five years preceding the SDHS were fully protected against neonatal tetanus, either because the mother had had at least two tetanus toxoid injections during that pregnancy or because she had had the number of doses required for lifetime protection.

The majority of births in the five years before the survey were delivered in a health facility ( 74 percent). The births took place more often in public health facilities (43 percent) than in Mission or other private health facilities. Twelve percent of births were assisted by a doctor, 62 percent by a nurse or nursing assistant, and 5 percent by a traditional birth attendant. Eight percent of births were delivered by caesarean section.

Twenty-five percent of mothers received a postnatal checkup for the most recent birth in the five years preceding the survey, with 22 percent having the checkup within the critical 48 hours after delivery.

## Breastfeeding and Nutrition

Overall, 87 percent of children in Swaziland are breastfed for some period of time (ever breastfed). The median duration of any breastfeeding in Swaziland is almost 17 months. However, the median duration of exclusive breastfeeding is much shorter ( 0.7 months).

Appropriate infant and young child feeding (IYCF) practices include increasing the amount and variety of foods a child consumes as it gets older, while maintaining frequent breastfeeding. Seven in ten children age 6-23 months in Swaziland were fed according to the recommended minimum standards with respect to food diversity. Among breastfed children age 6-23 months, about three-quarters were fed according to the minimum standards (consumed foods from 3 or more food groups), while, among non-breastfed children age 6-23 months, only 60 percent were fed according to the minimum standards (consumed foods from 4 or more food groups).

Overall, 42 percent of children age 6-59 months have some degree of anaemia. About one in five children are mildly anaemic, 19 percent have moderate anaemia and less than 1 percent have severe anaemia. The proportion of children age 5-11 years with some degree of anaemia is 18 percent; less than 1 percent of these children are severely anaemic. The national prevalence of anaemia among children age 12-14 years is virtually identical to that
among children age 5-11 years, and a majority of these children are mildly anaemic (17 percent).

Thirty percent of women age 15-49 have some degree of anaemia, with the majority classified as mildly anaemic ( 23 percent). Less than 1 percent of these women are considered severely anaemic. Pregnant women are more likely to be anaemic ( 40 percent) than breastfeeding women ( 29 percent) or women who are neither pregnant nor breastfeeding ( 30 percent). This could be a result of the high demand of iron and folate during pregnancy. Men age 15-49 are substantially less likely to be anaemic than women the same age ( 13 percent and 30 percent, respectively), and less than 1 percent of these men are considered severely anaemic. Women and men age 50 and over show a pattern that is the reverse of that seen for women and men age 15-49, with men age 50 and over substantially more likely to be anaemic than their female counterparts ( 31 percent and 21 percent, respectively).

At the time of the survey, 29 percent of children under age five were stunted (short for their age), 3 percent were wasted (thin for their height), and 5 percent were underweight (thin for their age). Nationally, only 2 percent of children are overweight for their age. Malnutrition rates are generally highest during the period when children are being weaned. Nearly half of children age 18-23 months are stunted, and 19 percent are severely stunted.

Overall, 46 percent of women and 72 percent of men have a body mass index (BMI) in the normal range. Comparatively few women are malnourished; only 3 percent of women are thin, and 1 percent are severely thin. Malnutrition is higher among men, with 10 percent of men assessed as too thin, and 3 percent considered moderately or severely thin. At the other end of the BMI range, 14 percent of men are assessed as overweight (BMI 25-29.9) and 4 percent are obese (BMI >30).. Among women, 28 percent are classified as overweight, and 23 percent are considered obese.

## Malaria

In interpreting the malaria programme indicators in Swaziland, it is important to recognise that the disease affects an estimated 30 percent of the population where malaria is most prevalent (the Lubombo Plateau, the lowveld, and parts of the middleveld). Ma-
laria is also seasonal, occurring mainly during or after the rainy season (from November to March). A substantial part of the SDHS fieldwork took place outside of this period.

Overall, 6 percent of households in Swaziland have at least one mosquito net (treated or untreated), and 4 percent have at least one insec-ticide-treated net. Usage of bednets is relatively low among young children and pregnant women, groups that are considered particularly vulnerable to the effects of the disease. On the night before the survey, less than 1 percent of children under age five and less than 1 percent of pregnant women slept under an ever-treated net.

Prophylactic use of antimalarial drugs is not common in Swaziland. Only 7 percent of women with a live birth in the two years preceding the survey reported taking antimalarial drugs for prevention. Less than 1 percent of children under age five with fever were given an antimalarial drug.

Indoor residual spraying is another component of efforts to control malaria transmission in Swaziland. Twelve percent of households reported that the interior walls of their dwelling had been sprayed, principally as part of a government programme. The prevalence of indoor spraying was highest in Lubombo (46 percent), where malaria is most prevalent.

## HIV/AIDS-related Knowledge and Behaviour

Knowledge of HIV and AIDS is universal in Swaziland. All women and 99 percent of men age 15-49 have heard of AIDS. Among those age 50 and over, 96 percent of women and 97 percent of men have heard about AIDS.

At the same time, however, only half of women ( 52 percent) and men ( 51 percent) have what can be considered comprehensive knowledge about the modes of HIV transmission and prevention. Comprehensive knowledge means knowing that consistent use of condoms and having just one uninfected, faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV, and re-
jecting the two most common local misconceptions about HIV transmission and prevention. Comprehensive knowledge is lower among those age 50 and over ( 21 percent for women and 25 percent for men).

A high proportion of women and men age 15-49 know that HIV can be transmitted by breastfeeding and that the risk of mother-to-child transmission (MTCT) can be reduced by taking special drugs during pregnancy. Both aspects of MTCT are known to 76 percent of women and over 64 percent of men age $15-49$. The level of awareness is somewhat lower among women and men age 50 and over.

Given that most HIV infections in Swaziland are contracted through heterosexual contact, information on the proportion of women and men who have multiple partners or engage in higher-risk sex (i.e., sexual intercourse with a non-marital, non-cohabiting partner) is important for planning prevention programmes. The 2006-07 SDHS results indicate that 2 percent of women and 23 percent of men age 15-49 had two or more partners during the 12 months preceding the survey. For older adults, the proportions are about half ( 1 percent of women and 10 percent of men). Sexual intercourse with a non-marital noncohabiting partner is more common than sexual intercourse with multiple partners; 44 percent of women and 58 percent of men age 15-49 who had sex in the 12 months preceding the survey reported having had sex with a non-marital, non-cohabiting partner. Such behaviour is less common among those age 50 and over; 12 percent of women and 10 percent of men in this age group who had sex in the 12 months preceding the survey reported having had sex with a nonmarital, non-cohabiting partner. Among respondents age 15-49 who engaged in higher-risk sexual intercourse, 55 percent of women and 68 percent of men reported using a condom at the last higher-risk sexual intercourse.

The 2006-07 SDHS also obtained information on the coverage of HIV testing. Among adults age 1549,36 percent of women and 17 percent of men have been tested for HIV at some time, and received the results of the test. Twenty-two percent of women and 9 percent of men received their results within the 12 months preceding the survey.

## HIV Prevalence

Results from the HIV testing component in the 2006-07 SDHS indicate that 26 percent of Swazi adults age 15-49 are infected with HIV. Among women, the HIV rate is 31 percent, compared with 20 percent among men. HIV prevalence peaks at 49 percent for women age 25-29, which is almost five times the rate among women age 15-19 and more than twice the rate observed among women age 45-49. HIV prevalence increases from 2 percent among men in the $15-19$ age group to 45 percent in the age group 35-39 and then decreases to 28 percent among men age 45-49. HIV prevalence for women and men age 50 or over is 12 percent and 18 percent, respectively. Among the population age 2-14 years, 4 percent of girls and boys are infected.

HIV prevalence is higher in urban than in rural areas ( 31 percent and 24 percent, respectively, for women and men age 15-49). By region, Hhohho has the highest prevalence rate (29 percent), followed by Lubombo (26 percent) and Manzini (25 percent), while Shiselweni (23 percent) has the lowest HIV prevalence rate.

More than 700 cohabiting couples were tested for HIV in the 2006-07 SDHS. Results indicated that for 55 percent of these couples, both partners tested negative for HIV; 29 percent of couples, both partners tested positive for HIV; and in 16 percent of couples, the results were discordant, that is, one partner was infected and the other was not. In 8 percent of couples, the male partner was infected and the woman was not, while in another 9 percent of couples, the woman was infected and the man was not.

## Orphans and Vulnerable Children

Seventy-eight percent of children under age 18 in the households sampled for the SDHS were not living with both parents, and 34 percent were not living with either parent. Twenty-three percent of children under age 18 were orphaned, that is, one or both parents were dead. The percentage increases rapidly with age, from 7 percent among children under age five to 37 percent among children age 15-17 years. Overall, 12 percent of children under age 18 were consid-
ered vulnerable, i.e., they lived in a household in which at least one adult had been chronically ill during the year preceding the survey or at least one parent living in the household or elsewhere had suffered from a chronic illness. Three in ten children in Swaziland are considered orphaned or vulnerable.

## Youth

Interviews with children age 12-14 were designed to obtain information about risk factors associated with HIV infection. Respondents were asked questions about home care and protection, media exposure, knowledge and attitudes about sex, and knowledge of AIDS.

One important topic was identifying the person who cares for the child at home. Grandmothers play an important role in taking care of children, even when both parents are still alive (21 percent). Their role is even greater when the child is orphaned (37 percent).

Children benefit from knowing about the physiology of human reproduction and the ways a person can protect against sexual or reproductive diseases and problems. Six in ten youth (61 percent) said that they know the meaning of having sex. Knowledge is higher among girls and urban residents. Sex and sexual abuse are topics of discussion between some youth and their parents or guardians (37 percent and 43 percent, respectively). Girls are much more likely to have talked about sex with a parent or other caregiver than boys ( 47 percent compared with 25 percent).

Almost all children age 12-14 have heard of HIV/AIDS (97 percent) and there are no major variations by background characteristics. Overall, 64 percent of children mentioned abstaining from sex as a way of reducing the chances of getting AIDS, 47 percent mentioned the use of condoms, and 19 percent mentioned avoiding blood transfusions. One in six children (15 percent) said that the chances of contracting AIDS can be reduced or avoided by being faithful to one sexual partner. Half of children age 12-14 in the survey know of a place for AIDS testing. Girls and children living in urban areas are more likely than other children to know where to go for the AIDS testing.

## SWAZILAND



## Henry Ginindza and Rachel Masuku

### 1.1 History, GeOGraphy, and EConomy

## History

Swaziland became independent of British colonial rule in September 1968. It is one of the few countries in the world operating under monarchy rule. The King is the Head of State and his mother, the Indlovukazi or Queen Mother, is the mother of the nation..

Swaziland's first constitution in over 30 years was ratified by King Mswati III in July 2005 and it became effective in February 2006.

The majority of the population is ethnic Swazi, mixed with a small number of Zulus and nonAfricans.

## Geography

The Kingdom of Swaziland is the smallest landlocked country in Southern Africa measuring approximately $17,000 \mathrm{~km}^{2}$. The country enjoys a tropical to near-temperate climate along the western highlands, which rises to an altitude of over 1,800 metres above sea level, while the lowveld areas are generally hot. Swaziland lies in a summer rainfall region.

## Economy

Although manufacturing contributes a growing share to Swaziland's GDP, the economy is largely agricultural because most industries process agricultural produce. These include sugar processing, wood pulp production, food canning and so on. Other agriculture products include corn, citrus fruits, livestock, and pineapple, among others.

The performance of the Swazi economy has been stagnant over the last five years, averaging an annual growth rate of around two percent. This has been largely due to fluctuations in the performance of the agricultural sector brought about by changes in climatic conditions as well as changes in prices in the world market. Persistent drought and disease have affected production, resulting in failure to meet export quota requirements

### 1.2 POPULATION

The population census is the major source of historical demographic data. The first detailed population census was conducted in 1966 and since then, censuses have been conducted every ten years, i.e., 1986, 1997, and 2007. Table 1.1 shows that in 1976 the population of Swaziland was about half a million. Two decades later in 1997, the population had almost doubled. The high growth rate of the population is brought about by high fertility and declining mortality levels. According to the 1997 Population and Housing Census, life expectancy at birth is 60 years.

The population per square kilometre almost doubled over the 20 -year period, from 29 persons in 1976 to 54 persons in 1997. The proportion of urban residents increased significantly from 15 percent in 1976 to 23 percent in 1997.

### 1.3 Population, Family Planning, and HIV Policies and Programmes

The National Population Policy was adopted in 2003 to focus on the implementation of the social development component of the National Development Strategy. The overall objective of the policy is to improve the quality of life by influencing demographic trends and responding to emerging challenges such as HIV/AIDS.

The specific objectives of the population policy are to:

| Table 1.1 Basic demographic indicators |  |  |  |
| :---: | :---: | :---: | :---: |
| Selected demographic indicators for Swaziland, 1976, 1986, and 1997 Population and Housing Censuses |  |  |  |
|  | 1976 | 1986 | 1997 |
| Indicator | PHC | PHC | PHC |
| Population | 494,534 | 681,059 | 929,718 |
| Intercensal growth rate (percent) | 2.5 | 3.3 | 2.9 |
| Density (pop./km ${ }^{2}$ ) | 29 | 39 | 54 |
| Percent urban | 15.2 | 22.8 | 23.1 |
| Crude birth rate | 51.6 | 48.3 | 36.39 |
| Crude death rate | 18.5 | 13.0 | 7.6 |
| Total fertility rate | 5.2 | 6.4 | 4.5 |
| Infant mortality rate | u | 99 | 78 |
| Male | 205 | u | u |
| Female | 180 | u | u |
| Life expectancy at birth (years) | 46 | 56 | 60 |
| $\mathrm{u}=$ No information <br> Source: CSO. nd. 1976 Population and Housing Census, Vol. CSO. nd. 1986 Population and Housing Census, Vol. 4; CSO. nd. 1997 Population and Housing Census Vol. 4. |  |  |  |
|  |  |  |  |

- Improve the health and welfare status of the population
- Curb the further spread of HIV/AIDS
- Reduce the social and economic impact of HIV/AIDS
- Reduce the level of fertility
- Control the influx of illegal immigrants
- Promote gender equality and equity at all levels and spheres of society
- Promote the use of natural resources
- Contribute towards increasing food security at the household and national levels
- Reduce rural-urban migration
- Improve the availability, quality, and timeliness of population-related data and research for use in policy and planning
- Contribute towards reducing the levels of unemployment and poverty
- Contribute towards the improvement of the accessibility, quality, and relevance of high school and tertiary education
- Improve knowledge of the role that cultural beliefs and practices play in population-related issues
- Promote the creation of a legal framework that is responsive to population concerns
- Improve the availability, quality, and accessibility of population-related IEC
- Promote the integration of population concerns in development planning at all levels
- Contribute towards addressing the special needs of children, youth, the elderly, and persons with disabilities
- Integrate population and family life education into the school curricula
- Improve the quality of housing and related services


## The National Policy on HIV/AIDS

As the HIV/AIDS epidemic affects all sectors, its control demands a well coordinated response. It is necessary to have policies that provide a framework, direction, and general principles for the national response, including prevention, care, and support to those infected and affected by the epidemic, and mitigation of its impact.

The National Multisectoral HIV and AIDS Policy was adopted in July 2006 with the goal of providing the framework, direction and general principles for interventions. The policy thus strengthens and expands efforts to manage and co-ordinate the response, promotes prevention interventions, provides effective treatment, care and support to people living with HIV/AIDS and mitigates the impact of the epidemic.

The National Emergency Response Council on HIV and AIDS (NERCHA) is guided by the 'three ones principles': one coordinating body, one strategic plan, and one monitoring and evaluation framework.

### 1.4 Objectives

## Main Objective

The principal objective of the 2006-07 Swaziland Demographic and Health Survey (SDHS) was to provide up-to-date information on fertility, childhood mortality, marriage, fertility preferences, awareness, and use of family planning methods, infant feeding practices, maternal and child health, maternal mortality, HIV/AIDS-related knowledge and behaviour and prevalence of HIV and anaemia.

More specifically the 2006-07 SDHS was aimed at achieving the following;

- Determine key demographic rates, particularly fertility, under-five mortality, and adult mortality rates
- Investigate the direct and indirect factors which determine the level and trends of fertility
- Measure the level of contraceptive knowledge and practice of women and men by method
- Determine immunization coverage and prevalence and treatment of diarrhoea and acute respiratory diseases among children under five
- Determine infant and young child feeding practices and assess the nutritional status of children 6-59 months, women age 15-49 years, and men aged 15-49 years
- Estimate prevalence of anaemia
- Assess knowledge and attitudes of women and men regarding sexually transmitted infections and HIV/AIDS, and evaluate patterns of recent behaviour regarding condom use
- Identify behaviours that protect or predispose the population to HIV infection
- Examine social, economic, and cultural determinants of HIV
- Determine the proportion of households with orphans and vulnerable children (OVCs)
- Determine the proportion of households with sick people taken care at household level
- Determine HIV prevalence among males and females age 2 years and older
- Determine the use of iodized salt in households
- Describe care and protection of children age 12-14 years, and their knowledge and attitudes about sex and HIV/AIDS.

This information is intended to provide data to assist policymakers and programme implementers to monitor and evaluate existing programmes and to design new strategies for demographic, social and health policies in Swaziland. The survey also provides data to monitor the country's achievement towards the Millenium Development Goals.

### 1.5 Orgnisation of the Survey

The 2006-07 Swaziland Demographic and Health Survey (SDHS) is a national-level sample survey designed to provide information on various demographic and maternal and child health issues in Swaziland. The SDHS was implemented by the Central Statistical Office (CSO) at the request of the Ministry of Health and Social Welfare (MOHSW). The majority of the local costs of the survey were provided by the Government of Swaziland. Macro International Inc. (Macro) provided technical assistance
to the SDHS as part of the worldwide USAID-funded MEASURE Demographic and Health Surveys (DHS) programme. The Human Sciences Research Council (HSRC) of South Africa assisted during the design phase of the survey. Through a subcontract with Macro, the Global Clinical and Viral Laboratory (GCVL) of South Africa provided support for the training and laboratory processing for the HIV testing component of the survey. Funds to support Macro's and GCVL's assistance and to defray some local costs were provided by USAID and the Centres for Disease Control and Prevention (CDC)-Global AIDS Programme operating under the President's Emergency Plan for AIDS Relief (PEPFAR). Other organisations supporting SDHS included the National Emergency Response Council on HIV/AIDS (NERCHA), HIV/AIDS Prevention and Care (HAPAC), UNFPA, UNICEF, Italian Cooperation, the World Health Organisation, UNAIDS, and the Population Services International (PSI).

### 1.6 SAMPLE DESIGN

The 2006-07 SDHS was designed to provide estimates of health and demographic indicators at the national level, for urban-rural areas, and for the four regions of Manzini, Hhohho, Lubombo, and Shiselweni. Standard DHS sampling policy recommends a minimum of 1,000 to 1,200 women per major domain. To meet this criterion, the number of households selected in each of the various domains, particularly urban areas, was not proportional to the actual size of the population in the domain. As a result, the SDHS sample is not self-weighting at the national level, and weights must be applied to the data to obtain the national-level estimates.

The 2006-07 SDHS sample points (clusters) were selected from a list of enumeration areas (EAs) defined in the 1997 Swaziland Population and Housing Census. A total of 275 clusters were drawn from the census sample frame, 111 in the urban areas and 164 in the rural areas.

CSO staff conducted an exhaustive listing of households in each of the SDHS clusters in August and September 2005. From these lists, a systematic sample of households was drawn for a total of 5,500 households. All women and men age 15-49 identified in these households were eligible for individual interview. In addition, a sub-sample of half of these households (2,750 households) was selected randomly in which all boys and girls age 12-14 and persons age 50 and older were eligible for individual interview. In the SDHS households where youth and older adults were interviewed, all individuals age 6 months and older were eligible for anaemia testing and all individuals age 2 and older were eligible for HIV testing. In the SDHS households where only women and men age 15-49 were interviewed, children age 6 months to 5 years were eligible for the anaemia testing and women and men age 15-49 were eligible for anaemia and HIV testing.

During the household listing, field staff used Global Positioning System (GPS) receivers to establish and record the geographic coordinates of each of the SDHS clusters.

### 1.7 Questionnaires

Five types of questionnaires were used for the SDHS: the Household Questionnaire, the Woman's Questionnaire, the Man's Questionnaire, the Youth Questionnaire, and the Older Adult Questionnaire. The contents of the questionnaires were based on questionnaires developed for the MEASURE DHS programme. The Youth Questionnaire was adapted from the 2002 Nelson Mandela/HSRC Study of HIV/AIDS in South Africa. The SDHS questionnaires were developed in collaboration with a wide range of stakeholders. After the SDHS survey instruments were drafted, they were translated into and printed in the local language, Siswati, for pretesting.

The Household Questionnaire was used to list all the usual members and visitors in the selected households. Basic information was collected on the characteristics of each person listed, including age, sex, education, and relationship to the head of the household. The Household Questionnaire was also used
to identify persons eligible for the individual interview. In addition, information was collected about the dwelling, such as the source of water; type of toilet facilities; materials used to construct the house; ownership of various consumer goods; use of bed nets; and care and free external support received by chronically ill household members and orphans and vulnerable children. The results of anthropometric measurement and anaemia testing were recorded in the Household Questionnaire, as was the information on the consent of eligible household members for the HIV testing.

The Woman's Questionnaire was used to collect information from all women age 15-49 and covered the following topics:

- Background characteristics (age, education, religion, etc.)
- Birth history
- Knowledge and use of family planning methods
- Antenatal and delivery care
- Infant feeding practices including patterns of breastfeeding
- Vaccinations
- Childhood illnesses and treatment
- Marriage and sexual activity
- Fertility preferences
- Husband's background and woman's work status
- Adult (maternal) mortality
- HIV/AIDS-related knowledge, attitudes, and behaviour.

The Man's Questionnaire was shorter than the Woman's Questionnaire, but covered many of the same topics, excluding the reproductive history and sections dealing with maternal and child health. The Older Adult Questionnaire obtained limited information on the background characteristics of the population age 50 and over and on HIV/AIDS knowledge, attitudes, and risk behaviour. The Youth Questionnaire included questions on knowledge and attitudes about sex, and factors exposing youth to risk of abuse.

### 1.8 Anaemia and HIV Testing

Haemoglobin testing is the primary method of anaemia diagnosis. In the SDHS, haemoglobin measurement was performed in the field by non-medical personnel. Prior to collecting the blood specimen, all participants age 12 and older and were asked to give informed consent to the testing.

Prior to asking the consent of unmarried youth age 12-17, consent was obtained from the parent or other adult responsible for the child at the time of the survey. For children age 6 months- 11 years, consent was asked only from the parent or guardian. The consent statement explained the purpose of the test, informed prospective subjects tested and/or their caretakers how the test would be done, advised them that the results would be available as soon as the test was completed, and requested permission for the test to be carried out.

### 1.9 Pretest, Training, and Fieldwork

## Pretest

Two pretests were conducted for the 2006-07 SDHS. The first was aimed at testing the flow of the questions and the translation from English to Siswati. Given the fact that this was the first SDHS to be conducted in the country, this pretest was also viewed as a pilot exercise for the survey organising committee. The first pretest was conducted in August-September 2005. Pretest activities started with a
training of trainers. The trainers were drawn from the CSO, the MOHSW, NERCHA, and the Ministry of Agriculture. Macro staff assisted with the training of trainers and Macro and HSRC staff assisted with the pretest training.

Eight women and 16 men participated in the field staff training. All but five of the participants had worked in the SDHS as household listers. The SDHS trainers and several guest lecturers gave talks to introduce specific topics in the survey, such as sexual and reproductive health, water and sanitation, malaria, nutrition, and HIV/AIDS. The pretest was conducted in both urban and rural areas to help gauge how respondents' reception of the SDHS teams might vary in different localities. On average, the Household Questionnaire took one hour to complete, the Woman's Questionnaire took two hours, the Man's Questionnaire took one hour, the Youth Questionnaire took 20 minutes, and the Older Adult Questionnaire took 30 minutes.

The second pretest was carried out in April-May 2006 after the review of the HIV testing protocol was completed at CDC Atlanta. This pretest combined interviews and collection of blood samples for anaemia and HIV tests.

## Training

A total of 83 persons, 38 males and 45 females, were trained to be the 2006-07 SDHS fieldworkers. They were grouped in two classes. Many of the trainees had participated in both the first and second pretest. The training followed the standard DHS training procedures, including instructions on how to conduct interviews and how to fill in all five questionnaires, classroom demonstration and practice in administering the questionnaires, and tests. The participants also had a chance to practice interviewing in actual households and discuss their experience before the fieldwork began.

With respect to the biomarker data collection, the staff responsible for the anaemia and HIV testing received extensive classroom training plus additional field practice. As part of the training, they were given thorough training in informed consent procedures, how to take finger stick blood spot samples, and how to handle and package the dried blood spots. All staff received training in universal precautions and the disposal of hazardous waste. During the training, there were special lectures on the HIV/AIDS epidemic.

## Fieldwork

Fieldwork for the 2006-07 SDHS was carried out by 10 mobile interviewing teams, each consisting of one supervisor, one field editor, three to four female interviewers, and one or two male interviewers. Two or three of the interviewers on each team were assigned to take the blood samples for the anaemia and HIV testing. Fieldwork commenced in July 2006 and was completed in February 2007.

### 1.10 HIV Testing

The SDHS HIV testing protocol involved the collection of at least three blood spots from a finger prick (generally the same prick used to obtain the blood drop for anaemia testing) on a special filter paper card. The HIV testing in the SDHS was anonymous, i.e., it was conducted in such fashion that the results could not be linked to individual respondents. A unique random identification number (bar-code) was assigned to each eligible respondent consenting to the testing, and labels containing that number were affixed to the filter paper card, the questionnaire, and a field tracking form at the time of the collection of the sample. No other identifiers were linked to the dried blood spot (DBS) samples from SDHS respondents during the HIV testing.

Because of the anonymous nature of the testing approach in the SDHS, it was not possible to provide information on the results from the HIV testing conducted during the SDHS. In lieu of providing the SDHS test results, written and verbal information was provided on counselling and testing (VCT) sites where free confidential counselling and HIV testing were available during the survey. In addition, any person (whether or not they participated in the SDHS) approaching an SDHS team with a request about VCT was provided with information on the sites, in an effort to increase VCT usage in Swaziland.

### 1.11 Data Processing

All questionnaires for the SDHS were returned to CSO central office for data processing. The processing operation consisted of office editing, coding of open-ended questions, data entry, double-entry verification, and resolving inconsistencies found by computer programmes developed for the SDHS. The SDHS data entry and editing programmes used CSPro, a computer software package specifically designed for processing survey data such as that produced by DHS surveys. Data processing commenced in August 2006 and was completed in April 2007.

The HIV testing was carried out at the NRL between August 2006 and June 2007.

### 1.12 Response Rates

Table 1.2 shows the response rates for the SDHS 2006-07. The response rates are important because they may affect the reliability of the results. Of a total of 5,500 households selected in the sample, 5,086 were occupied at the time of the fieldwork. This difference between the number of selected households and the number of occupied households is due to structures being vacated or destroyed. Successful interviews were conducted in 4,843 households, yielding a response rate of 95 percent.

In the households interviewed in the survey, a total of 5,301 eligible women age 15-49 were identified. Interviews were completed with 4,987 of these women, yielding a 94 percent response rate. In the same households, a total of 4,675 eligible men age 15-49 were identified and interviews were completed with 4,156 of these men, yielding a male response rate of 89 percent. The response rates are slightly lower in the urban sample than in the rural sample, and lower among men than women. The principal reasons for non-response among both eligible men and women were refusal and the failure to find individuals at home despite repeated visits to the households. Men have lower response rates than women due to higher refusal rates, and more frequent and longer absence from the households, principally due to employment and their lifestyle (see Appendix A).

Table 1.3 shows the results of the household and individual interviews in households selected for youth and older adults. A total of 2,750 households were selected in the sample, of which 2,543 were occupied at the time of the fieldwork. This difference between the number of selected households and the number of occupied households is due to structures being vacated or destroyed. Successful interviews were conducted in 2,410 households, yielding a response rate of 95 percent.

In the households selected for the youth and older adult survey, a total of 477 eligible girls and 439 eligible boys age 12-14 were identified. Interviews were completed with 459 girls and 411 boys, yielding response rates of 96 percent and 94 percent, respectively. The response rates for girls are the same for urban and rural areas. For boys, the response rate is slightly lower in urban than in rural areas (89 percent compared with 94 percent).

A total of 693 eligible women age 50 and over were identified. Interviews were completed with 661 of these women, yielding a 95 percent response rate. In the same households, a total of 492 eligible men age 50 and over were identified and interviews were completed with 456 of these men, yielding a male response rate of 93 percent. The response rates are slightly lower in urban than in rural areas, and lower among men than women.

| Table 1.3 Results of the household and individual interviews in households selected for youth and older adults survey |  |  |  |
| :---: | :---: | :---: | :---: |
| Number of households, number of interviews, and response rates for subsample selected for the youth and older adults survey, according to residence (unweighted), Swaziland 2006-07 |  |  |  |
|  | Residence |  | Total |
| Result | Urban | Rural |  |
| Household interviews |  |  |  |
| Households selected | 1,110 | 1,640 | 2,750 |
| Households occupied | 1,020 | 1,523 | 2,543 |
| Households interviewed | 937 | 1,473 | 2,410 |
| Household response rate ${ }^{1}$ | 91.9 | 96.7 | 94.8 |
| Interviews with female youth 12-14 |  |  |  |
| Number of eligible female youth | 78 | 399 | 477 |
| Number of eligible female youth interviewed | 75 | 384 | 459 |
| Eligible female youth response rate ${ }^{2}$ | 96.2 | 96.2 | 96.2 |
| Interviews with male youth 12-14 |  |  |  |
| Number of eligible male youth | 62 | 377 | 439 |
| Number of eligible male youth interviewed | 55 | 356 | 411 |
| Eligible male youth response rate ${ }^{2}$ | 88.7 | 94.4 | 93.6 |
| Interviews with women 50+ |  |  |  |
| Number of eligible women 50+ | 114 | 579 | 693 |
| Number of eligible women 50+ interviewed | 104 | 557 | 661 |
| Eligible women 50+ response rate ${ }^{2}$ | 91.2 | 96.2 | 95.4 |
| Interviews with men 50+ |  |  |  |
| Number of eligible men 50+ | 111 | 381 | 492 |
| Number of eligible men 50+ interviewed | 96 | 360 | 456 |
| Eligible men $50+$ response rate ${ }^{2}$ | 86.5 | 94.5 | 92.7 |
| ${ }^{1}$ Households interviewed/households occupied <br> ${ }^{2}$ Respondents interviewed/eligible respondents |  |  |  |
|  |  |  |  |  |

# HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS 

## Petronella Mamba

This chapter presents a description of the demographic and socioeconomic characteristics of the population in the households sampled in the 2006-07 SDHS. For the purpose of the 2006-07 SDHS, a household was defined as a person or a group of persons, related or unrelated, who live together and share a common source of food. The Household Questionnaire (see Appendix E) included a schedule collecting basic demographic and socioeconomic information (e.g., age, sex, education attainment, and current school attendance) for all usual residents and visitors of the household who spent the night preceding the interview. This method of data collection allows the analysis of the results for either the de jure (usual residents) or de facto (those who are there at the time of the survey) populations. The household questionnaire also obtained information on housing facilities (e.g., sources of water supply and sanitation facilities) and household possessions.

The information presented in this chapter is intended to facilitate interpretation of the key demographic, socioeconomic, and health indices presented later in the report. It is also intended to assist in the assessment of the representativeness of the survey sample.

### 2.1 Population by Age and Sex

Age and sex are important demographic variables and are the primary basis of demographic classification. Needs and services for a given population mostly depend on its age and sex structure. Age and sex structure have a strong bearing on the population's fertility, mortality, and nuptiality patterns. Table 2.1 gives the age and sex distribution of the de facto population by urban and rural residence. Eight in ten of the Swazi population live in the rural areas.

| Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Urban |  |  | Rural |  |  | Total |  |
| Age | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| <5 | 12.0 | 12.0 | 12.0 | 16.2 | 14.2 | 15.2 | 15.3 | 13.8 | 14.5 |
| 5-9 | 10.0 | 10.3 | 10.2 | 16.6 | 14.0 | 15.2 | 15.2 | 13.2 | 14.1 |
| 10-14 | 10.3 | 10.1 | 10.2 | 17.1 | 15.8 | 16.4 | 15.7 | 14.6 | 15.1 |
| 15-19 | 9.8 | 10.9 | 10.4 | 14.4 | 11.8 | 13.0 | 13.5 | 11.6 | 12.5 |
| 20-24 | 11.8 | 12.6 | 12.2 | 8.9 | 8.9 | 8.9 | 9.5 | 9.7 | 9.6 |
| 25-29 | 11.7 | 10.8 | 11.2 | 5.5 | 5.8 | 5.6 | 6.8 | 6.8 | 6.8 |
| 30-34 | 8.6 | 8.8 | 8.7 | 3.6 | 4.7 | 4.2 | 4.7 | 5.5 | 5.1 |
| 35-39 | 7.4 | 6.8 | 7.1 | 3.2 | 4.2 | 3.7 | 4.1 | 4.7 | 4.4 |
| 40-44 | 5.2 | 5.2 | 5.2 | 2.3 | 3.7 | 3.0 | 2.9 | 4.0 | 3.5 |
| 45-49 | 4.3 | 3.8 | 4.0 | 2.3 | 3.4 | 2.9 | 2.7 | 3.5 | 3.1 |
| 50-54 | 3.7 | 3.0 | 3.3 | 2.3 | 3.3 | 2.8 | 2.6 | 3.3 | 2.9 |
| 55-59 | 2.5 | 2.3 | 2.4 | 1.8 | 2.2 | 2.0 | 2.0 | 2.2 | 2.1 |
| 60-64 | 1.7 | 1.3 | 1.5 | 2.3 | 2.7 | 2.5 | 2.2 | 2.4 | 2.3 |
| 65-69 | 0.6 | 0.9 | 0.8 | 1.3 | 1.8 | 1.6 | 1.1 | 1.7 | 1.4 |
| 70-74 | 0.1 | 0.5 | 0.3 | 1.1 | 1.3 | 1.2 | 0.9 | 1.1 | 1.0 |
| 75-79 | 0.1 | 0.4 | 0.3 | 0.6 | 0.9 | 0.8 | 0.5 | 0.8 | 0.7 |
| $80+$ | 0.3 | 0.3 | 0.3 | 0.5 | 1.3 | 0.9 | 0.5 | 1.1 | 0.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 2,259 | 2,488 | 4,747 | 8,345 | 9,520 | 17,865 | 10,604 | 12,008 | 22,612 |

There are more women than men in Swaziland ( 53 percent and 47 percent, respectively). The sex ratio (proportion of men out of 100 women) is 88 . This is consistent with findings of the 1986 census (89) and the 1997 census ( 90 ). The sex ratio in the rural areas is lower than that in the urban areas ( 88 percent compared with 91 percent), which may be due to higher rural-urban migration among men than among women.

Swaziland's population is young, with 44 percent of the total population under 15 years of age, and less than 4 percent is 65 years or older. Figure 2.1 illustrates the age structure of the household population in a population pyramid. The two bottom bars of the pyramid that represent population 0-9 years are smaller than the bar for the next older age. This means that although fertility levels are still high, resulting in a wide base, the country has experienced significant fertility declines. The bars between age 20 and 45 for both males and females narrow rapidly with increasing age, reflecting high rates of mortality, probably due to AIDS-related factors. The proportion of women in the older age groups is much higher than the proportion of men. Because there is no evidence of significantly higher emigration among men, one may conclude that men have higher mortality levels.

Figure 2.1 Population Pyramid


SDHS 2006-07

### 2.2 Household Composition

Information on key aspects of the composition of households, including the sex of the head of the household and the size of the household, is presented in Table 2.2. These characteristics are important because they are associated with the welfare of the household. Female-headed households are, for example, typically poorer than male-headed households. Economic resources are often more limited in larger households. Moreover, where the size of the household is large, crowding also can lead to health problems.

Table 2.2 presents the distribution of households by the sex of heads of household and by household size in urban and rural areas. The average size of households according to residence is also
given. Households in Swaziland are almost as likely to be headed by a woman as by a man (48 percent compared with 52 percent). There has been an increasing trend in the proportion of households headed by a woman, from 40 percent in the 1986 census to 43 percent in the 1997 census. Rural households are more likely than urban households to be headed by a woman; 52 percent of households in rural areas are headed by a woman compared to 39 percent in urban areas. Both rural and urban areas showed an increase in the proportion of households headed by a woman. The 1997 census found that 49 percent of households in the rural areas and 31 percent of households in the urban areas were headed by a woman.

Generally, the size of a household has a negative correlation with socioeconomic status. However, it has also been found that there are significant benefits in having other members in a household. The overall mean size of households in 2006-07 is 4.6 persons; rural households are larger than urban households (5.4 and 3.0 persons per household, respectively). The mean household size is 5.3 persons in 1997, a drop from the 6.0 persons per household reported in the 1986 census. There are marked differences between rural and urban households. In the rural areas, 16 percent of households have nine or more members compared to only 3 percent in the urban areas. As expected, a large proportion (35 percent) of households in the urban areas has only one member. In contrast, one-person households account for only one-fifth of all households in Swaziland.

### 2.3 Education Of the Household Population

Education is a key determinant of the lifestyle and status an individual enjoys in a society. Studies have consistently shown that educational attainment has a positive effect on health behaviours and attitudes. Results from the 2006-07 SDHS can be used to look at educational attainment among household members and

| Table 2.2 Household composition |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of households by sex of head of household and by household size and by mean size of household according to residence, Swaziland 2006-07 |  |  |  |
| Characteristic | Resi | ence |  |
|  | Urban | Rural | Total |
| Household headship |  |  |  |
| Male | 61.0 | 47.9 | 52.1 |
| Female | 39.0 | 52.1 | 47.9 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of usual members |  |  |  |
| 0 | 0.2 | 0.4 | 0.3 |
| 1 | 35.4 | 12.5 | 19.9 |
| 2 | 19.1 | 9.6 | 12.6 |
| 3 | 12.5 | 10.2 | 11.0 |
| 4 | 12.1 | 12.7 | 12.5 |
| 5 | 7.0 | 12.2 | 10.5 |
| 6 | 5.3 | 10.4 | 8.7 |
| 7 | 3.0 | 9.1 | 7.1 |
| 8 | 2.2 | 6.6 | 5.1 |
| $9+$ | 3.3 | 16.4 | 12.2 |
| Total | 100.0 | 100.0 | 100.0 |
| Mean size of households | 3.0 | 5.4 | 4.6 |
| Number of households | 1,565 | 3,278 | 4,843 |

Note: Table is based on de jure household members, i.e., usual residents. school attendance, repetition, and drop-out rates among youth. In the analysis presented below, the official age for entry into the primary level is age six years. The official primary level of schooling consists of seven years (Grades 1-7) while the number of years assumed for completion of secondary school is five years.

### 2.3.1 Educational Attainment

The 2006-07 SDHS collected education data on the highest level completed for males and females age six years and over. Table 2.3.1 and 2.3.2 show that, in general, the proportion of males and females with no education has been declining over time and the proportion attaining higher levels has been increasing.

There are slight differentials between sexes in the levels of education attained, with men generally having higher levels. For example, the proportion of women with no education is 13 percent compared with 12 percent of men, and 5 percent of women have had higher than secondary level of education, compared to 6 percent of men.

There are large differentials by residence. For both rural men and women, urban residents consistently have higher levels of education. For instance, the median years completed for urban women is 7.8 years, whereas for women in rural areas it is only 4.7 years. For men, the corresponding proportion is 8.0 and 3.9 years, respectively. Across regions, men and women in Manzini are better educated than those in other regions. On the other hand, men and women in Lubombo are the least educated. As expected, educational attainment is positively related to the wealth status of the household. Women and men in wealthier households are better educated than those in poorer households.

| Percent distribution of the de facto female household populations age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | No education | Some primary | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | Tertiary | Don't know/ missing | Total | Number | Median years completed |
| Age |  |  |  |  |  |  |  |  |  |  |
| 6-9 | 16.2 | 82.7 | 0.2 | 0.2 | 0.0 | 0.0 | 0.7 | 100.0 | 1,274 | 0.3 |
| 10-14 | 2.3 | 85.3 | 6.6 | 5.4 | 0.0 | 0.0 | 0.4 | 100.0 | 1,754 | 3.7 |
| 15-19 | 2.7 | 27.4 | 14.6 | 50.1 | 4.3 | 0.6 | 0.3 | 100.0 | 1,392 | 7.3 |
| 20-24 | 6.0 | 16.8 | 10.4 | 44.7 | 16.9 | 5.0 | 0.3 | 100.0 | 1,161 | 8.4 |
| 25-29 | 6.9 | 14.4 | 9.8 | 34.4 | 22.6 | 11.2 | 0.7 | 100.0 | 821 | 9.1 |
| 30-34 | 8.2 | 16.3 | 12.4 | 34.2 | 15.7 | 12.5 | 0.8 | 100.0 | 663 | 8.6 |
| 35-39 | 11.1 | 22.3 | 11.8 | 29.3 | 11.5 | 12.7 | 1.2 | 100.0 | 569 | 7.7 |
| 40-44 | 15.5 | 25.7 | 8.3 | 29.2 | 8.3 | 11.0 | 1.9 | 100.0 | 483 | 6.9 |
| 45-49 | 22.4 | 25.0 | 11.9 | 25.1 | 6.3 | 8.1 | 1.2 | 100.0 | 415 | 6.2 |
| 50-54 | 28.4 | 30.9 | 13.6 | 16.7 | 2.7 | 6.8 | 0.9 | 100.0 | 392 | 4.8 |
| 55-59 | 26.8 | 36.1 | 11.1 | 14.5 | 2.0 | 7.9 | 1.6 | 100.0 | 262 | 3.9 |
| 60-64 | 47.7 | 36.0 | 5.5 | 5.0 | 1.1 | 3.0 | 1.9 | 100.0 | 293 | 0.4 |
| $65+$ | 59.3 | 28.8 | 5.7 | 3.1 | 0.2 | 1.3 | 1.6 | 100.0 | 559 | 0.0 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 7.7 | 27.6 | 9.0 | 29.1 | 13.5 | 12.5 | 0.7 | 100.0 | 2,134 | 7.8 |
| Rural | 15.0 | 45.5 | 8.9 | 22.1 | 5.2 | 2.5 | 0.8 | 100.0 | 7,906 | 4.7 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 14.1 | 37.3 | 9.1 | 25.5 | 7.0 | 6.2 | 0.8 | 100.0 | 2,615 | 5.7 |
| Manzini | 9.3 | 39.9 | 9.5 | 25.1 | 9.5 | 6.0 | 0.7 | 100.0 | 3,167 | 6.0 |
| Shiselweni | 13.0 | 45.6 | 8.8 | 23.6 | 5.8 | 2.7 | 0.5 | 100.0 | 2,313 | 4.9 |
| Lubombo | 19.8 | 46.0 | 7.6 | 18.7 | 4.1 | 2.7 | 1.1 | 100.0 | 1,944 | 4.0 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 26.8 | 52.1 | 7.7 | 10.8 | 2.0 | 0.0 | 0.5 | 100.0 | 1,946 | 2.4 |
| Second | 18.3 | 49.7 | 9.6 | 17.9 | 3.2 | 0.2 | 1.1 | 100.0 | 1,988 | 3.8 |
| Middle | 10.3 | 46.5 | 10.2 | 26.1 | 5.4 | 0.7 | 0.7 | 100.0 | 1,988 | 5.3 |
| Fourth | 8.0 | 37.2 | 9.0 | 33.4 | 9.0 | 2.7 | 0.8 | 100.0 | 2,037 | 6.5 |
| Highest | 4.7 | 24.2 | 7.9 | 29.2 | 14.5 | 18.8 | 0.8 | 100.0 | 2,081 | 8.8 |
| Total | 13.4 | 41.7 | 8.9 | 23.6 | 6.9 | 4.6 | 0.8 | 100.0 | 10,040 | 5.3 |
| Note: Total includes three females with information missing on age ${ }^{1}$ Completed $7^{\text {th }}$ grade at the primary level <br> ${ }^{2}$ Completed $5{ }^{\text {th }}$ grade at the secondary level |  |  |  |  |  |  |  |  |  |  |

Table 2.3.2 Educational attainment of the male household population
Percent distribution of the de facto male household populations age six and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Swaziland 2006-07

| Background characteristic | No education | Some primary | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | Tertiary | Don't know/ missing | Total | Number | Median years completed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |  |
| 6-9 | 19.9 | 79.3 | 0.1 | 0.0 | 0.0 | 0.0 | 0.7 | 100.0 | 1,314 | 0.1 |
| 10-14 | 3.4 | 89.7 | 5.0 | 1.8 | 0.1 | 0.0 | 0.1 | 100.0 | 1,661 | 3.0 |
| 15-19 | 3.4 | 39.7 | 13.8 | 39.4 | 3.4 | 0.1 | 0.2 | 100.0 | 1,427 | 6.5 |
| 20-24 | 5.1 | 20.0 | 9.9 | 39.0 | 20.1 | 5.3 | 0.7 | 100.0 | 1,011 | 8.6 |
| 25-29 | 7.8 | 17.4 | 7.5 | 30.1 | 25.7 | 11.0 | 0.5 | 100.0 | 719 | 8.9 |
| 30-34 | 9.2 | 18.9 | 10.1 | 21.4 | 24.7 | 14.7 | 0.9 | 100.0 | 496 | 9.3 |
| 35-39 | 11.5 | 20.5 | 10.1 | 23.3 | 13.9 | 19.6 | 1.2 | 100.0 | 431 | 8.4 |
| 40-44 | 19.1 | 16.3 | 10.2 | 22.0 | 11.7 | 20.0 | 0.6 | 100.0 | 306 | 8.3 |
| 45-49 | 20.4 | 22.9 | 9.2 | 21.1 | 10.6 | 15.4 | 0.3 | 100.0 | 285 | 6.7 |
| 50-54 | 24.9 | 22.7 | 7.6 | 21.7 | 7.6 | 13.6 | 1.9 | 100.0 | 273 | 6.2 |
| 55-59 | 23.5 | 33.7 | 11.6 | 17.3 | 1.7 | 11.2 | 1.0 | 100.0 | 210 | 4.6 |
| 60-64 | 35.0 | 29.8 | 11.6 | 10.8 | 3.2 | 7.4 | 2.2 | 100.0 | 233 | 3.5 |
| $65+$ | 55.5 | 24.4 | 8.6 | 8.7 | 0.6 | 1.3 | 0.9 | 100.0 | 318 | 0.0 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 7.7 | 29.5 | 7.1 | 24.3 | 16.0 | 14.9 | 0.5 | 100.0 | 1,946 | 8.0 |
| Rural | 13.5 | 50.9 | 8.1 | 18.0 | 6.1 | 2.8 | 0.6 | 100.0 | 6,738 | 3.9 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 13.2 | 41.0 | 7.9 | 21.2 | 9.2 | 6.8 | 0.7 | 100.0 | 2,285 | 5.3 |
| Manzini | 7.8 | 43.5 | 9.0 | 20.4 | 11.1 | 7.5 | 0.6 | 100.0 | 2,669 | 5.8 |
| Shiselweni | 13.1 | 51.1 | 7.6 | 19.5 | 6.1 | 2.5 | 0.1 | 100.0 | 1,940 | 4.0 |
| Lubombo | 16.6 | 50.9 | 6.6 | 15.6 | 5.2 | 4.0 | 1.0 | 100.0 | 1,790 | 3.4 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 24.3 | 58.5 | 6.2 | 8.7 | 1.4 | 0.0 | 0.8 | 100.0 | 1,646 | 2.0 |
| Second | 13.3 | 54.1 | 9.9 | 17.4 | 4.5 | 0.3 | 0.4 | 100.0 | 1,613 | 3.7 |
| Middle | 10.2 | 52.3 | 8.2 | 20.9 | 6.7 | 1.1 | 0.5 | 100.0 | 1,759 | 4.4 |
| Fourth | 9.6 | 42.0 | 8.3 | 25.4 | 10.3 | 3.8 | 0.7 | 100.0 | 1,782 | 5.7 |
| Highest | 5.0 | 26.4 | 7.0 | 23.4 | 17.1 | 20.5 | 0.5 | 100.0 | 1,884 | 9.0 |
| Total | 12.2 | 46.1 | 7.9 | 19.4 | 8.3 | 5.5 | 0.6 | 100.0 | 8,684 | 4.7 |

Note: Total includes one male with information missing on age
${ }^{1}$ Completed $7^{\text {th }}$ grade at the primary level
${ }^{2}$ Completed $5{ }^{\text {th }}$ grade at the secondary level

### 2.3.2 School Attendance Rates

Table 2.4 presents primary school and secondary school net and gross attendance ratios (NAR and GAR) for the school year that started in 2005 by household residence and regions. The NAR for primary school is the percentage of the primary-school-age (6-12 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school-age (13-17 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent. The GAR for primary school is the total number of primary school students, of any age, expressed as a percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students, of any age, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent. Youth are considered to be attending school currently if they attended formal academic school at any point during the given school year.

Table 2.4 School attendance ratios
Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling; and the gender parity index (GPI), according to background characteristics, Swaziland 2006-07

| Background characteristic | Net attendance ratio ${ }^{1}$ |  |  |  | Gross attendance ratio ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total |  | Male | Female | Total |  |
| PRIMARY SCHOOL |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 87.7 | 84.6 | 86.1 | 0.96 | 113.0 | 99.7 | 106.1 | 0.88 |
| Rural | 82.1 | 85.7 | 83.9 | 1.05 | 125.0 | 118.6 | 121.8 | 0.95 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 82.0 | 89.2 | 85.6 | 1.09 | 123.7 | 117.5 | 120.6 | 0.95 |
| Manzini | 89.5 | 87.6 | 88.5 | 0.98 | 126.5 | 118.0 | 122.2 | 0.93 |
| Shiselweni | 75.5 | 80.5 | 77.9 | 1.07 | 112.7 | 110.5 | 111.6 | 0.98 |
| Lubombo | 83.8 | 84.4 | 84.1 | 1.01 | 131.5 | 116.2 | 123.8 | 0.88 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 73.4 | 79.8 | 76.6 | 1.09 | 118.3 | 113.7 | 116.0 | 0.96 |
| Second | 84.2 | 84.8 | 84.5 | 1.01 | 126.6 | 117.4 | 121.9 | 0.93 |
| Middle | 83.7 | 88.6 | 86.1 | 1.06 | 126.1 | 120.7 | 123.5 | 0.96 |
| Fourth | 85.6 | 88.4 | 87.0 | 1.03 | 127.5 | 117.5 | 122.5 | 0.92 |
| Highest | 91.6 | 88.0 | 89.8 | 0.96 | 117.2 | 106.9 | 112.0 | 0.91 |
| Total | 82.9 | 85.6 | 84.2 | 1.03 | 123.3 | 115.7 | 119.5 | 0.94 |
| SECONDARY SCHOOL |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 52.2 | 54.2 | 53.2 | 1.04 | 83.1 | 83.9 | 83.5 | 1.01 |
| Rural | 27.1 | 38.1 | 32.5 | 1.41 | 54.1 | 55.5 | 54.8 | 1.03 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 32.1 | 43.5 | 37.7 | 1.36 | 58.5 | 63.9 | 61.1 | 1.09 |
| Manzini | 35.7 | 42.7 | 39.3 | 1.20 | 67.9 | 61.3 | 64.5 | 0.90 |
| Shiselweni | 30.3 | 39.1 | 34.6 | 1.29 | 57.8 | 58.6 | 58.2 | 1.01 |
| Lubombo | 22.7 | 35.1 | 28.6 | 1.55 | 45.1 | 53.8 | 49.2 | 1.19 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 11.7 | 20.2 | 15.9 | 1.73 | 27.2 | 29.9 | 28.5 | 1.10 |
| Second | 25.8 | 29.8 | 27.8 | 1.16 | 51.8 | 45.0 | 48.5 | 0.87 |
| Middle | 26.6 | 43.4 | 34.8 | 1.63 | 58.0 | 60.5 | 59.2 | 1.04 |
| Fourth | 35.7 | 48.5 | 42.1 | 1.36 | 64.2 | 76.6 | 70.4 | 1.19 |
| Highest | 59.5 | 61.2 | 60.4 | 1.03 | 97.4 | 87.7 | 92.3 | 0.90 |
| Total | 30.7 | 40.5 | 35.6 | 1.32 | 58.2 | 59.8 | 59.0 | 1.03 |

${ }^{1}$ The NAR for primary school is the percentage of the primary-school-age ( $6-12$ years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary-school-age (13-17 years) population that is attending secondary school. By definition the NAR cannot exceed 100 percent.
${ }^{2}$ The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary-school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary-school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.
${ }^{3}$ The GPI for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The GPI for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

The gender parity index (GPI) assesses sex-related differences in school attendance rates and is calculated by dividing the GAR for females by the GAR for males. A GPI of less than one indicates a gender disparity in favour of males, i.e., a higher proportion of males than females attends that level of schooling. A GPI greater than one indicates a gender disparity in favour of females. A GPI of one indicates parity or equality between the rates of participation for males and females.

Table 2.4 shows that for both boys and girls at primary school level, the overall net attendance ratio (NAR) is 84 percent; 83 percent for males and 86 percent for females. For males, those living in urban areas are much more likely to attend school than rural residents ( 88 percent compared with 82 percent). For females, however, attendance in the rural and urban areas is similar ( 86 percent and 85 percent, respectively).

It is worth noting that the GARs for both boys and girls at primary-school level are much higher than 100, signifying that the number of primary-school students of any age is larger than the official primary-school-age population. Across all subgroups of population, the GAR for boys is higher than for girls. The GPI for the GAR is consistently less than one, implying more boys are outside the primaryschool age range.

At secondary level, the NARs are very low (36 percent); 31 percent for boys and 41 percent for girls. The ratio is lowest for boys in the rural areas ( 27 percent), in Lubombo ( 23 percent), and in the lowest wealth quintile ( 12 percent). The GPI for NAR at secondary school is 1.32 , implying that girls of secondary-school age are more likely than boys in the same age group to attend secondary school. GAR at secondary level is only 59 percent, which implies that there is a significant number of secondary-schoolage boys and girls who are not attending secondary school.

Figure 2.2 illustrates age-specific attendance rates. This includes the percentage of population age 5-24 years who attend school, regardless of the level attended (primary, secondary, or higher).

Figure 2.2 Age-specific Attendance Rates of the De-Facto Population 5 to 24 Years


SDHS 2006-07

### 2.3.3 Grade Repetition and Dropout Rates

Repetition and dropout rates presented in Table 2.5 describe the flow of pupils through the educational system in Swaziland at the primary level. The repetition rates indicate the percentage of pupils who attended a particular grade during the school year that started in 2004 who again attended that
same class during the following school year. The dropout rates show the percentage of pupils in a grade during the school year that started in 2005 who no longer attended school the following school year.

The repetition rates generally decline from 23 percent in Grade 1 to 9 percent in Grade 7. There are differentials across subgroups of students, with boys, rural students, and students from households in the lowest wealth quintiles consistently having higher repetition rates than other students. For example, the repetition rates for boys range from 26 percent to 12 percent, while for girls the corresponding rates range from 20 percent to 7 percent. Students in Hhohho have the lowest repetition rates, while those in Lubombo have the highest repetition rates.

| Table 2.5 Grade repetition and dropout rates |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Repetition and dropout rates for the de facto household population age 5-24 who attended primary school in the previous school year by school grade, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |
| Background characteristic | School grade |  |  |  |  |  |  |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| REPETITION RATE ${ }^{1}$ |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| Male | 26.4 | 13.4 | 18.6 | 14.8 | 12.5 | 13.4 | 11.8 |
| Female | 19.7 | 8.6 | 13.9 | 11.3 | 10.7 | 10.4 | 6.7 |
| Residence |  |  |  |  |  |  |  |
| Urban | 22.9 | 9.2 | 8.6 | 8.1 | 5.4 | 9.2 | 8.8 |
| Rural | 23.2 | 11.4 | 17.6 | 13.8 | 12.7 | 12.3 | 9.4 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 25.3 | 4.8 | 8.0 | 7.5 | 5.6 | 16.0 | 10.2 |
| Manzini | 19.9 | 16.3 | 16.5 | 14.1 | 10.7 | 9.0 | 7.6 |
| Shiselweni | 23.2 | 11.8 | 19.3 | 13.5 | 16.2 | 8.7 | 11.1 |
| Lubombo | 25.7 | 10.3 | 22.0 | 17.1 | 14.7 | 14.9 | 9.0 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 25.6 | 13.6 | 19.6 | 17.6 | 15.1 | 9.8 | 11.2 |
| Second | 22.7 | 12.5 | 15.2 | 11.5 | 13.3 | 14.0 | 10.8 |
| Middle | 23.5 | 12.7 | 17.4 | 11.1 | 14.8 | 16.2 | 6.9 |
| Fourth | 19.6 | 5.6 | 18.8 | 13.5 | 7.2 | 10.3 | 12.8 |
| Highest | 23.4 | 9.6 | 7.2 | 11.1 | 5.7 | 6.9 | 5.7 |
| Total | 23.2 | 11.2 | 16.3 | 13.0 | 11.6 | 11.8 | 9.3 |
| DROPOUT RATE ${ }^{2}$ |  |  |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| Male | 3.4 | 5.0 | 3.1 | 3.2 | 3.1 | 7.7 | 8.0 |
| Female | 2.6 | 2.1 | 2.1 | 6.4 | 4.3 | 6.9 | 9.4 |
| Residence |  |  |  |  |  |  |  |
| Urban | 0.7 | 2.2 | 0.0 | 6.6 | 3.7 | 9.1 | 8.9 |
| Rural | 3.4 | 3.8 | 3.0 | 4.5 | 3.7 | 7.0 | 8.6 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 2.8 | 0.6 | 1.0 | 0.8 | 3.0 | 3.9 | 4.1 |
| Manzini | 0.4 | 1.5 | 0.7 | 1.5 | 2.6 | 4.6 | 7.3 |
| Shiselweni | 6.7 | 10.8 | 6.9 | 14.3 | 6.2 | 15.7 | 13.9 |
| Lubombo | 2.7 | 1.3 | 1.4 | 2.3 | 3.0 | 4.8 | 8.9 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 3.5 | 5.7 | 3.7 | 4.5 | 3.3 | 4.9 | 6.8 |
| Second | 4.2 | 4.6 | 3.6 | 7.5 | 2.4 | 10.2 | 9.8 |
| Middle | 2.5 | 2.4 | 3.1 | 5.1 | 4.8 | 7.0 | 10.1 |
| Fourth | 3.2 | 2.3 | 0.4 | 2.8 | 5.2 | 7.8 | 9.7 |
| Highest | 0.2 | 2.0 | 0.8 | 4.0 | 2.9 | 5.7 | 5.8 |
| Total | 3.0 | 3.7 | 2.6 | 4.8 | 3.7 | 7.3 | 8.6 |

[^0]The dropout rates are higher for boys than for girls in the lower grades, but boys’ dropout rates are lower than girls' rates. in the higher grades. This may be due to more girls dropping out due to various reasons including a pregnancy. For both boys and girls, the dropout rates increase with grade. Also notable is that children in Shiselweni are more likely to drop out of school than children in other regions. In sum, in Swaziland on average one in three children who started Grade 1 will not complete Grade 7.

### 2.4 Household Environment

The physical characteristics of the dwelling in which a household lives are important determinants of the health status of household members, especially children. They can also be used as indicators of the socio-economic status of households. The 2006-07 SDHS respondents were asked a number of questions about their household environment, including questions on the source of drinking water: type of sanitation facility; type of flooring; walls; and roof; and number of rooms in the dwelling. The results are presented both in terms of households and of their usual members.

### 2.4.1 Drinking Water

Increasing access to improved drinking water is one of the Millennium Development Goals that Swaziland, along with other nations worldwide. has adopted (United Nations General Assembly, 2001). Table 2.6 includes a number of indicators that are useful in monitoring household access to improved drinking water (WHO and UNICEF, 2005). The source of drinking water is an indicator of whether it is suitable for drinking. Sources which are likely to provide water suitable for drinking are identified as improved sources in Table 2.6. They include a piped source within the dwelling or plot, public tap, tube well or borehole, protected well or spring, and rainwater. ${ }^{1}$ Lack of ready access to a water source may limit the quantity of suitable drinking water that is available to a household. Even if the water is obtained from an improved source, water that must be fetched from a source that is not immediately accessible to the household may be contaminated during transport or storage. Another factor in considering the accessibility of water sources is the fact that the burden of going for water often falls disproportionately on female members of the household. Finally, home water treatment can be effective in improving the quality of household drinking water.

Seven in ten households in Swaziland obtain water from improved sources. This proportion represents an improvement from the 1997 Population and Housing Census ( 56 percent). There is a wide variation between urban and rural households ( 92 percent and 59 percent, respectively). In the ten years since the 1997 Census, rural areas have shown a greater improvement in access to safe water than urban areas. According to the 1997 Population and Housing Census, the proportion of households with safe drinking water is 89 percent in urban areas and 40 percent in rural areas.

Water is available on the premises for 76 percent of households in the urban areas and 27 percent of households in rural areas. Overall, one in four households take 30 or more minutes to obtain water; 4 percent in the urban areas compared with 34 percent in the rural areas.

Getting water is a chore predominantly done by women. Water is collected by women for more than half of the population; 46 percent by women age 15 or older and 7 percent by female children under age 15. This is particularly true in the rural areas, where for 54 percent of the population's water is collected by women age 15 or older and 8 percent by female children under age 15 .

[^1]Households were further asked if they treat the water before drinking it. A total of 86 percent of households do not treat the water in any way. The most common form of treatment is the use of bleach or chlorine (8 percent).

| Table 2.6 Household drinking water |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households and de jure population by source, time to collect, and person who usually collects drinking water; and percentage of households and the de jure population by treatment of drinking water, according to residence, Swaziland 2006-07 |  |  |  |  |  |  |
| Characteristic | Households |  |  | Population |  |  |
|  | Urban | Rural | Total | Urban | Rural | Total |
| Source of drinking water |  |  |  |  |  |  |
| Improved source | 92.2 | 59.1 | 69.8 | 91.9 | 56.4 | 63.9 |
| Piped water into dwelling/yard/plot | 72.6 | 22.5 | 38.7 | 72.4 | 19.8 | 30.9 |
| Public tap/standpipe | 15.2 | 18.7 | 17.6 | 14.1 | 18.5 | 17.6 |
| Tube well or borehole | 2.5 | 9.0 | 6.9 | 3.0 | 8.6 | 7.4 |
| Protected dug well | 1.2 | 5.8 | 4.3 | 1.3 | 6.6 | 5.5 |
| Protected spring | 0.5 | 2.2 | 1.7 | 0.9 | 2.3 | 2.0 |
| Rainwater | 0.1 | 0.7 | 0.5 | 0.2 | 0.6 | 0.5 |
| Non-improved source | 7.4 | 40.6 | 29.9 | 7.8 | 43.3 | 35.8 |
| Unprotected dug well | 2.9 | 12.3 | 9.3 | 2.9 | 13.5 | 11.2 |
| Unprotected spring | 0.8 | 4.6 | 3.4 | 1.2 | 5.3 | 4.4 |
| Tanker truck/cart with small tank | 1.5 | 1.6 | 1.6 | 1.3 | 1.2 | 1.2 |
| Surface water | 2.2 | 22.0 | 15.6 | 2.3 | 23.3 | 18.9 |
| Other | 0.3 | 0.3 | 0.3 | 0.3 | 0.2 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Percentage using any improved source of drinking water | 92.3 | 59.1 | 69.8 | 91.9 | 56.4 | 63.9 |
| Time to obtain drinking water (round trip) |  |  |  |  |  |  |
| Water on premises | 75.9 | 27.3 | 43.0 | 75.4 | 24.0 | 34.8 |
| Less than 30 minutes | 19.4 | 38.0 | 32.0 | 20.2 | 40.0 | 35.8 |
| 30 minutes or longer | 4.3 | 34.2 | 24.5 | 3.9 | 35.5 | 28.8 |
| Don't know/missing | 0.3 | 0.6 | 0.5 | 0.5 | 0.5 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Person who usually collects drinking water |  |  |  |  |  |  |
| Adult female 15+ | 14.5 | 48.9 | 37.8 | 16.7 | 54.2 | 46.3 |
| Adult male 15+ | 7.0 | 11.7 | 10.2 | 3.9 | 7.4 | 6.7 |
| Female child under age 15 | 0.7 | 6.3 | 4.5 | 1.4 | 8.1 | 6.7 |
| Male child under age 15 | 0.9 | 3.3 | 2.5 | 1.5 | 3.5 | 3.1 |
| Any person | 0.4 | 1.6 | 1.2 | 0.5 | 2.0 | 1.7 |
| Other | 0.4 | 0.8 | 0.6 | 0.2 | 0.9 | 0.7 |
| Water on premises | 75.9 | 27.3 | 43.0 | 75.4 | 24.0 | 34.8 |
| Missing | 0.3 | 0.2 | 0.2 | 0.3 | 0.1 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Water treatment prior to drinking ${ }^{1}$ |  |  |  |  |  |  |
| Boiled | 2.0 | 3.4 | 3.0 | 2.0 | 2.9 | 2.7 |
| Bleach/chlorine | 7.9 | 8.3 | 8.2 | 8.6 | 8.1 | 8.2 |
| Strained through cloth | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 |
| Ceramic, sand, or other filter | 0.5 | 0.5 | 0.5 | 0.4 | 0.4 | 0.4 |
| Other | 0.0 | 0.3 | 0.2 | 0.1 | 0.3 | 0.2 |
| No treatment | 84.9 | 86.6 | 86.0 | 84.7 | 87.5 | 86.9 |
| Percentage using an appropriate treatment method ${ }^{2}$ | 10.4 | 11.7 | 11.2 | 10.8 | 11.0 | 11.0 |
| Number | 1,565 | 3,278 | 4,843 | 4,705 | 17,598 | 22,302 |
| ${ }^{1}$ Respondents may report multiple treatment methods so the sum of treatment may exceed 100 percent. <br> ${ }^{2}$ Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting. |  |  |  |  |  |  |

### 2.4.2 Household Sanitation Facilities

Ensuring adequate sanitation facilities is another of the Millennium Development Goals which Swaziland shares with other countries. A household is classified as having an improved toilet if the toilet is used only by members of one household (i.e., it is not shared) and if the facility used by the household separates the waste from human contact (WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation, 2004).

Proper sanitation facilities lead to improved hygiene practices, and ultimately low infant mortality rates. Normally, one would expect the urban areas to have better sanitation facilities, but according to the 2006-07 SDHS, rural households in Swaziland have better sanitation facilities than urban households; 52 percent of the rural households use improved, not shared facilities compared with 44 percent of urban households (Table 2.7). The proportion of households using a flush toilet has declined from 20 percent in the 1997 Population and Housing Census to 15 percent in the 2006-07 SDHS. The majority of households in the urban areas ( 53 percent) use shared facilities, compared with 22 percent in the rural areas. The proportion of households who have no toilet facility declined from 24 percent in 1997 to 18 percent in the 2006-07 SDHS.

| Table 2.7 Household sanitation facilities |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Swaziland 2006-07 |  |  |  |  |  |  |
| Type of toilet/latrine facily | Households |  |  | Population |  |  |
|  | Urban | Rural | Total | Urban | Rural | Total |
| Improved, not shared facility | 43.5 | 52.1 | 49.4 | 55.6 | 56.7 | 56.5 |
| Flush/pour flush | 34.2 | 5.4 | 14.7 | 39.2 | 3.7 | 11.2 |
| Ordinary pit latrine | 7.2 | 34.0 | 25.4 | 13.0 | 37.7 | 32.5 |
| Ventilated improved pit (VIP) | 2.1 | 12.7 | 9.3 | 3.4 | 15.3 | 12.8 |
| Non-improved facility | 56.4 | 47.8 | 50.7 | 44.3 | 43.3 | 43.6 |
| Any facility shared with other households | 53.1 | 21.9 | 32.0 | 42.3 | 18.3 | 23.4 |
| No facility/bush/field | 2.5 | 25.6 | 18.2 | 1.7 | 24.7 | 19.9 |
| Other | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 |
| Missing | 0.7 | 0.2 | 0.4 | 0.3 | 0.2 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,565 | 3,278 | 4,843 | 4,705 | 17,598 | 22,302 |

### 2.4.3 Housing Characteristics

Table 2.8 presents information on a number of characteristics of the dwelling in which SDHS households live. These characteristics reflect the household's socioeconomic situation. They also may influence environmental conditions-for example, in the case of the use of biomass fuels, exposure to indoor pollution-that have a direct bearing on the health and welfare of household members.

The use of electricity as an energy source usually goes hand in hand with improved housing structures and a better standard of living. There have been a number of initiatives by the Government of Swaziland to bring electricity to rural areas in recent years. Clinics and schools are the first targets of the programme. Thirty-five percent of households reported having electricity. There are marked differences between urban and rural; only 22 percent of rural households reported using electricity compared with 63 percent of urban households.

| Table 2.8 Housing characteristics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households and de jure population by housing characteristics and percentage using solid fuel for cooking; and among those using solid fuels, percent distribution by type of fire/stove, according to residence, Swaziland 2006-07 |  |  |  |  |  |  |
| Housing characteristic | Households |  |  | Population |  |  |
|  | Urban | Rural | Total | Urban | Rural | Total |
| Electricity |  |  |  |  |  |  |
| Yes | 63.4 | 21.7 | 35.2 | 65.2 | 20.2 | 29.7 |
| No | 36.6 | 78.3 | 64.8 | 34.8 | 79.8 | 70.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Flooring material |  |  |  |  |  |  |
| Earth, sand | 1.2 | 3.8 | 3.0 | 1.4 | 3.2 | 2.8 |
| Dung | 0.4 | 12.0 | 8.2 | 0.5 | 12.0 | 9.6 |
| Wood/planks | 0.4 | 0.0 | 0.1 | 0.5 | 0.0 | 0.1 |
| Parquet or polished wood | 0.3 | 0.0 | 0.1 | 0.4 | 0.0 | 0.1 |
| Vinyl or asphalt strips | 2.7 | 0.1 | 1.0 | 3.1 | 0.1 | 0.7 |
| Ceramic tiles | 9.6 | 2.5 | 4.8 | 12.6 | 2.2 | 4.4 |
| Cement | 80.3 | 80.4 | 80.3 | 75.9 | 81.4 | 80.2 |
| Carpet | 4.9 | 1.1 | 2.3 | 5.4 | 1.0 | 1.9 |
| Other/missing | 0.2 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Wall material |  |  |  |  |  |  |
| Cane/palm/trunks | 0.1 | 0.2 | 0.2 | 0.3 | 0.2 | 0.2 |
| Mud | 4.7 | 12.0 | 9.7 | 4.6 | 11.7 | 10.2 |
| Bamboo with mud | 1.1 | 3.3 | 2.5 | 1.1 | 3.0 | 2.6 |
| Stone with mud | 4.6 | 11.5 | 9.3 | 5.1 | 11.8 | 10.3 |
| Plywood | 0.4 | 0.1 | 0.2 | 0.3 | 0.1 | 0.1 |
| Reused wood | 0.4 | 0.3 | 0.3 | 0.7 | 0.4 | 0.4 |
| Cement | 51.7 | 29.9 | 37.0 | 52.6 | 30.2 | 34.9 |
| Stone with lime/ cement | 2.2 | 5.9 | 4.7 | 2.3 | 6.3 | 5.4 |
| Bricks | 3.9 | 3.2 | 3.4 | 3.2 | 2.7 | 2.8 |
| Cement blocks | 27.5 | 28.2 | 28.0 | 26.9 | 28.3 | 28.0 |
| Mud blocks | 2.7 | 4.7 | 4.0 | 2.5 | 4.9 | 4.4 |
| Wood planks/shingles | 0.4 | 0.2 | 0.3 | 0.3 | 0.1 | 0.1 |
| Other | 0.3 | 0.4 | 0.3 | 0.3 | 0.2 | 0.2 |
| Missing | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Roofing material |  |  |  |  |  |  |
| Grass | 0.4 | 16.9 | 11.5 | 0.5 | 17.4 | 13.8 |
| Wood planks | 0.2 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 |
| Corrugated iron | 81.7 | 80.6 | 80.9 | 82.6 | 80.5 | 80.9 |
| Asbestos | 10.5 | 0.3 | 3.6 | 8.6 | 0.1 | 1.9 |
| Tiles | 5.6 | 1.9 | 3.1 | 6.6 | 1.8 | 2.8 |
| Slate | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| Concrete | 1.0 | 0.1 | 0.4 | 1.0 | 0.0 | 0.2 |
| Other | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 | 0.1 |
| Missing | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Rooms used for sleeping |  |  |  |  |  |  |
| One | 54.2 | 25.7 | 34.9 | 35.5 | 14.6 | 19.0 |
| Two | 25.3 | 32.2 | 30.0 | 30.3 | 29.6 | 29.8 |
| Three or more | 20.3 | 41.8 | 34.8 | 34.1 | 55.6 | 51.0 |
| Missing | 0.2 | 0.3 | 0.3 | 0.1 | 0.2 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Place for cooking |  |  |  |  |  |  |
| In the house | 83.9 | 30.0 | 47.4 | 78.9 | 24.5 | 35.9 |
| In a separate building | 11.4 | 57.2 | 42.4 | 15.8 | 63.4 | 53.3 |
| Outdoors | 3.6 | 12.4 | 9.5 | 4.9 | 12.0 | 10.5 |
| Other | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 |
| Missing | 1.2 | 0.4 | 0.6 | 0.4 | 0.1 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
|  |  |  |  |  |  | ued... |


| Housing characteristic | Households |  |  | Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Total | Urban | Rural | Total |
| Cooking fuel |  |  |  |  |  |  |
| Electricity | 41.0 | 8.1 | 18.7 | 40.0 | 5.2 | 12.6 |
| Gas | 29.8 | 9.4 | 16.0 | 29.3 | 6.4 | 11.2 |
| Coal | 0.8 | 0.1 | 0.3 | 0.7 | 0.1 | 0.2 |
| Charcoal | 0.9 | 0.2 | 0.4 | 0.7 | 0.3 | 0.4 |
| Wood | 11.4 | 78.3 | 56.7 | 17.4 | 86.2 | 71.7 |
| Paraffin | 14.7 | 3.5 | 7.1 | 11.3 | 1.6 | 3.7 |
| No food cooked in household | 1.2 | 0.4 | 0.6 | 0.4 | 0.1 | 0.2 |
| Other | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 |
| Missing | 0.0 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Percentage using solid fuel for cooking | 13.2 | 78.6 | 57.4 | 18.8 | 86.6 | 72.3 |
| Number of households | 1,565 | 3,278 | 4,843 | 4,705 | 17,598 | 22,302 |

The type of material used for flooring is an indicator of socioeconomic status, and to some extent determines the household's vulnerability to exposure to disease-causing agents. Four in five households have a cement floor. Cow dung is more prevalent in rural than in urban areas ( 12 percent compared with less than 1 percent), while ceramic tiles are more often in urban than in rural households ( 10 percent compared with 3 percent).

Good-quality walls ensure that household members are protected from harsh weather conditions, and therefore exposure to hazardous factors. According to the 2006-07 SDHS, cement is the most often used material for outer walls ( 37 percent), followed by cement blocks ( 28 percent). Urban houses are much more likely than rural houses to have cement walls ( 52 percent compared with 30 percent).

The most common form of roofing for both rural and urban areas is corrugated iron (81 percent). Grass is the second most preferred type of roofing material and is almost exclusively used in rural areas (17 percent). Asbestos is used in 4 percent of households, mostly in urban areas. Tiles are also used as roofing material; they are used in 6 percent of households in urban areas and 2 percent of households in rural areas.

Congestion is an undesirable condition that can have adverse health effects. The number of rooms used for sleeping is therefore an indicator of the level of crowding. Most households have either one room ( 35 percent) or three rooms or more ( 35 percent) for sleeping. However, in terms of the population, more than half ( 51 percent) of all the people are living in households where there are three or more rooms for sleeping. One may conclude that overcrowding is not yet a problem in Swaziland.

Describing the cooking place as being indoors or outdoors is helpful in understanding the level of food exposure to harmful elements. Nine in ten households cook indoors, with 47 percent cooking in the house and 42 percent in a separate building. The latter is more common in rural areas ( 57 percent) compared than in urban areas (11 percent).

The type of fuel used for cooking may have a direct effect on people's health status, and is also an indicator of a household's socioeconomic status. Fifty-seven percent of households, or 72 percent of the population, use wood for cooking. There are marked differentials in cooking fuel between rural and urban households; 78 percent of rural households use wood, while 41 percent of urban households use electricity and 30 percent use gas. A significant proportion of households in urban areas ( 15 percent) use paraffin for cooking.

Windows are important for health reasons as they provide ventilation and light. The results of the 2006-07 SDHS show that most houses in Swaziland have some type of windows ( 96 percent); the proportion is lower in rural areas than in urban areas ( 95 percent compared with 99 percent). Glass and curtains are common in both urban and rural areas ( $86-96$ percent). Wooden windows are more common in rural than in urban areas ( 15 percent compared with 6 percent).

| Table 2.9 Type of windows |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households and de jure population using different types of windows, according to residence and region, Swaziland 2006-07 |  |  |  |  |  |  |
|  | Households |  |  | Population |  |  |
| Type of windows | Urban | Rural | Total | Urban | Rural | Total |
| Any windows | 99.1 | 94.8 | 96.2 | 99.1 | 95.7 | 96.4 |
| Windows with glass | 96.1 | 87.5 | 90.3 | 96.4 | 89.5 | 90.9 |
| Windows with screens | 5.6 | 1.9 | 3.1 | 5.7 | 2.1 | 2.8 |
| Windows with curtains | 94.9 | 86.0 | 88.9 | 95.0 | 88.2 | 89.6 |
| Wooden windows | 5.7 | 14.5 | 11.6 | 5.9 | 15.8 | 13.7 |
| Other windows | 3.7 | 4.0 | 3.9 | 4.0 | 4.2 | 4.1 |
| Number of households | 1,565 | 3,278 | 4,843 | 4,705 | 17,598 | 22,302 |

### 2.5 Household Possessions

The availability of durable consumer goods is a good indicator of a household's socioeconomic status. Moreover, each particular item has specific benefits. For instance, having access to a radio or a television exposes household members to innovative ideas; a refrigerator prolongs the wholesomeness of foods; and a means of transport allows greater access to many services away from the local area. Table 2.10 shows the availability of selected consumer goods by residence.

The most popular household effects are a watch/clock and a radio (each 77 percent). These items are available in urban areas and in rural areas. Stoves are also available in the majority of households-62 percent of households have a stove. One in three households has a TV set and a refrigerator. The majority of households in Swaziland have access to communication network, because 60 percent have access to a mobile phone.

The most common means of transportation is a car or truck (19 percent), followed by bicycle (10 percent). The use of a motorcycle/scooter, tractor, and animal-drawn cart is very limited.

Six in ten households in Swaziland own agricultural land. However, as expected, there is a significant variation between rural and urban households; 17 percent of urban households have agricultural land compared with 80 percent of rural households. This differential is also observed on ownership of farm animals; 74 percent of households in rural areas have farm animals compared with 9 percent in urban areas.

More than half (52 percent) of households reported a household member with a bank account. Access to formal monetary services varies by residence; 69 percent in urban areas compared with 43 percent in rural areas.

| Table 2.10 Household possessions |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of households and de jure population possessing various household effects, means of transportation, agricultural land and livestock/farm animals by residence, Swaziland 2006-07 |  |  |  |  |  |  |
|  | Households |  |  | Population |  |  |
| Possession | Urban | Rural | Total | Urban | Rural | Total |
| Household effects |  |  |  |  |  |  |
| Radio | 82.1 | 73.7 | 76.5 | 84.0 | 75.7 | 77.4 |
| Television | 54.4 | 26.4 | 35.4 | 62.1 | 28.0 | 35.2 |
| Mobile telephone | 75.1 | 53.3 | 60.3 | 78.0 | 58.1 | 62.3 |
| Non-mobile telephone | 20.1 | 8.7 | 12.4 | 28.0 | 9.8 | 13.6 |
| Refrigerator | 51.1 | 26.4 | 34.4 | 58.8 | 28.4 | 34.8 |
| Stove | 87.8 | 49.7 | 62.0 | 88.4 | 49.8 | 57.9 |
| Watch/clock | 83.8 | 73.5 | 76.9 | 87.9 | 77.4 | 79.6 |
| Means of transport |  |  |  |  |  |  |
| Bicycle | 9.4 | 9.5 | 9.5 | 12.4 | 10.9 | 11.2 |
| Motorcycle/scooter | 1.6 | 0.5 | 0.9 | 1.7 | 0.5 | 0.8 |
| Animal drawn cart | 0.3 | 2.9 | 2.1 | 0.2 | 4.3 | 3.4 |
| Car/truck | 24.5 | 15.6 | 18.5 | 32.2 | 17.1 | 20.3 |
| Tractor | 0.6 | 4.9 | 3.5 | 0.7 | 6.7 | 5.5 |
| Ownership of agricultural land | 16.5 | 79.5 | 59.1 | 21.6 | 86.1 | 72.5 |
| Ownership of farm animals ${ }^{1}$ | 8.8 | 74.2 | 53.1 | 15.2 | 84.3 | 69.7 |
| Household member with bank account | 69.3 | 43.3 | 51.7 | 72.4 | 44.6 | 50.4 |
| Number | 1,565 | 3,278 | 4,843 | 4,705 | 17,598 | 22,302 |
| ${ }^{1}$ Cattle, cows, bulls, horses, donkeys, mules, goats, sheep, or chickens |  |  |  |  |  |  |

### 2.6 Wealth Index

The wealth index is a background characteristic that is used throughout the report as a proxy for long-term standard of living of the household. It is based on the data on the household's ownership of consumer goods; dwelling characteristics; type of drinking water source; toilet facilities; and other characteristics that are related to a household's socioeconomic status. To construct the index, each of these assets was assigned a weight (factor score) generated through principal component analysis, and the resulting asset scores were standardized in relation to a standard normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset, and the scores were summed for each household. Individuals were ranked according to the total score of the household in which they resided. The sample was then divided into quintiles from one (lowest) to five (highest). A single asset index was developed on the basis of data from the entire country sample and this index is used in all the tabulations presented.

Table 2.11 shows the distribution of the de jure household population into five wealth levels (quintiles) based on the wealth index by residence and region. This distribution indicates the degree to which wealth is evenly (or unevenly) distributed by geographic areas. Six in ten of the population residing in urban areas are from the richest quintile. On the other hand, half of rural residents are in the two poorest quintiles. In terms of households, 55 percent of households in the urban areas are in the highest quintile, compared with 13 percent of households in the rural areas.

| Table 2.11 Wealth quintiles |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of the de jure population and households by wealth quintiles, according to residence and region, Swaziland 2006-07 |  |  |  |  |  |  |  |
| Residence/ region | Wealth quintile |  |  |  |  | Total | Number of population |
|  | Lowest | Second | Middle | Fourth | Highest |  |  |
| POPULATION |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |
| Urban | 1.3 | 3.5 | 11.1 | 25.9 | 58.2 | 100.0 | 4,705 |
| Rural | 25.0 | 24.4 | 22.4 | 18.4 | 9.8 | 100.0 | 17,598 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 15.2 | 18.2 | 21.2 | 20.3 | 25.1 | 100.0 | 5,830 |
| Manzini | 10.9 | 19.1 | 19.3 | 24.2 | 26.6 | 100.0 | 6,900 |
| Shiselweni | 26.8 | 22.8 | 23.8 | 19.0 | 7.6 | 100.0 | 5,121 |
| Lubombo | 32.6 | 20.7 | 15.2 | 14.1 | 17.5 | 100.0 | 4,451 |
| Total | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 100.0 | 22,302 |
| HOUSEHOLD |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |
| Urban | 0.9 | 2.7 | 11.5 | 29.9 | 55.0 | 100.0 | 1,565 |
| Rural | 24.7 | 23.2 | 20.9 | 18.2 | 12.9 | 100.0 | 3,278 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 12.2 | 14.9 | 18.9 | 23.2 | 30.7 | 100.0 | 1,370 |
| Manzini | 9.4 | 14.6 | 17.4 | 26.0 | 32.5 | 100.0 | 1,537 |
| Shiselweni | 26.3 | 21.9 | 21.9 | 19.3 | 10.7 | 100.0 | 931 |
| Lubombo | 26.6 | 17.1 | 13.5 | 16.7 | 26.2 | 100.0 | 1,005 |
| Total | 17.0 | 16.6 | 17.9 | 22.0 | 26.5 | 100.0 | 4,843 |

Among the four regions, households in Manzini and Hhohho are more likely to fall in the highest wealth quintile than those living in the other regions. In these regions, the proportion of households or population increases with the wealth quintile. Hhohho has the most even distribution of wealth, which may be explained by the fact that this region houses the Government headquarters, where the income of civil servants and other professionals is relatively evenly distributed. On the other hand, the Shiselweni and Lubombo regions have the highest proportion of the population in the lowest wealth quintile (26-27 percent). In Shiselweni, the proportion of households or population decreases with an increase in the wealth quintile. Lubombo presents the most skewed distribution of wealth, with 53 percent of its population in the two poorest quintiles and 18 percent of the population in the highest quintile. The situation in Lubombo may be explained by the fact that the only significant economic activity in this region is the sugar industry.

### 2.7 BIRTH REGISTRATION

The registration of births is the inscription of the facts of the birth into an official log kept at the registrar's office. A birth certificate is issued at the time of registration or later as proof of the registration of the birth. Birth registration is basic to ensuring a child's legal status and, thus, basic rights and services (UNICEF, 2006; United Nations General Assembly, 2002). The registration of vital events in most developing countries is a function of a number of socioeconomic factors. Registration of births is mandatory in Swaziland. However, for most families this is delayed until such time as it may be needed as a requirement to start schooling. Not all children who are registered may have a birth certificate since some certificates may have been lost or were never issued. However, all children with a certificate have been registered.

Table 2.11 presents the percentage of children under five years of age whose births were officially registered and the percentage who had a birth certificate at the time of the survey. Overall, 30 percent of births in the past five years were registered and 20 percent had a birth certificate. Older children are more likely than younger children to have been registered; 35 percent of children age 2-4 years were registered compared with 22 percent of children under age 2 . The SDHS reveals that there is no difference in birth registration according to sex. Children in urban areas are more likely to be registered and have a birth certificate than rural children ( 38 percent compared with 28 percent). According to administrative regions, Hhohho has the highest proportion of registered births (35 percent), followed by Manzini (31 percent), and Shiselweni (28 percent). Lubombo has the lowest birth registration coverage ( 24 percent). Coverage of birth registration increases with wealth status; it ranges from 18 percent for children in the lowest wealth quintile to 50 percent for children in the highest wealth quintile.

| Table 2.12 Birth registration of children under age five |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of de jure children under five years of age whose births are registered with the civil authorities, according to background characteristics, Swaziland 2006-07 |  |  |  |  |
|  | Percentage of children whose births are registered |  |  | Number of children |
| Background characteristic | Had a birth certificate | Did not have a birth certificate | Total registered |  |
| Age |  |  |  |  |
| <2 | 11.7 | 10.0 | 21.6 | 1,265 |
| 2-4 | 25.4 | 9.8 | 35.1 | 1,953 |
| Sex |  |  |  |  |
| Male | 19.9 | 9.9 | 29.8 | 1,600 |
| Female | 20.1 | 9.7 | 29.8 | 1,618 |
| Residence |  |  |  |  |
| Urban | 29.2 | 8.9 | 38.1 | 555 |
| Rural | 18.1 | 10.0 | 28.1 | 2,664 |
| Region |  |  |  |  |
| Hhohho | 24.9 | 10.1 | 35.0 | 835 |
| Manzini | 22.2 | 8.3 | 30.5 | 966 |
| Shiselweni | 16.5 | 11.5 | 28.0 | 779 |
| Lubombo | 14.5 | 9.8 | 24.3 | 638 |
| Wealth quintile |  |  |  |  |
| Lowest | 8.9 | 8.9 | 17.7 | 745 |
| Second | 13.9 | 10.8 | 24.7 | 754 |
| Middle | 21.4 | 10.1 | 31.5 | 627 |
| Fourth | 22.1 | 10.8 | 32.8 | 601 |
| Highest | 41.8 | 8.4 | 50.2 | 491 |
| Total | 20.0 | 9.8 | 29.8 | 3,219 |

## CHARACTERISTICS OF RESPONDENTS

## Henry Ginindza and Petronella Mamba

This chapter provides a profile of the respondents who were interviewed in the 2006-07 Swaziland DHS, including youth age 12-14, men and women age 15-49, and older adults age 50 and older. First, information is presented on a number of basic characteristics including age at the time of the survey, religion, marital status, residence, education, literacy, and media access. Then, the chapter explores adults' employment status, occupation, and earnings. An analysis of these variables provides the socioeconomic context within which demographic and reproductive health issues are examined in the subsequent chapters.

### 3.1 CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1.1 presents the distribution of women and men age $15-49$ by age, religion, marital status, urban-rural residence, region, education level, and wealth quintile. For both sexes, the proportion in each age group tends to decrease with increasing age. A high proportion of the respondents are young adults age 15-24 (47 percent of women and 53 percent of men). The majority of respondents are Zionists (37 percent each of women and men). One in four women and 18 percent of men are Protestants. A large proportion of men reported no religion.

Half of women have never been married, compared with 66 percent of men. Thirty-two percent of women and 23 percent of men are currently married. Ten percent of women and 6 percent of men are living together with their partners, 3 percent of women and 4 percent of men are divorced or separated, and 6 percent of women and 1 percent of men are widowed. Women and men are distributed almost equally by urban-rural residence and across regions.

Women are as likely as men to have no education. However, men are slightly more likely than women to have reached higher education levels. For instance, 21 percent of men have attended high school compared with 18 percent of women. Overall, slightly over 50 percent of the population have attained secondary education and above.

Table 3.1.2 shows the background characteristics of the 465 girls and 409 boys age 12-14 interviewed in the survey. The boys and girls are almost evenly distributed by age. About 88 percent of these boys and girls live in rural areas. Between 24-29 percent of boys and girls live in the Hhohho, Manzini, or Shiselweni regions, and only 20-21 percent live in the Lubombo region.

The distribution of the respondents by education is skewed, because of the small numbers of boys and girls age 12-14 who have no education and who have secondary or higher education. While girls age $12-14$ are less likely than boys to be in lower primary school ( 28 percent of girls compared with 43 percent of boys), they are more likely than boys of the same age to attend higher primary school (61 percent of girls compared with 50 percent of boys).

Table 3.1 .3 shows the distribution of women and men age 50 and older who were interviewed in the survey. It is interesting to note that 59 percent of women and 56 percent of men are 60 years or older. As in the case of younger populations, 87 percent of women and 82 percent of men live in the rural areas. Also, three in ten each of women and men are in Manzini, between 22-29 percent of women and men are in Hhohho and Shiselweni, and 19 percent or less are in Lubombo. Education among older adults is limited; 41 percent of women and 38 percent of men in this age group have had no education.

| Percent distribution of women and men age 15-49 by selected background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women |  |  | Men |  |  |
| Background characteristic | Weighted percent | Weighted number | Unweighted number | Weighted percent | Weighted number | Unweighted number |
| Age |  |  |  |  |  |  |
| 15-19 | 25.5 | 1,274 | 1,265 | 31.8 | 1,323 | 1,257 |
| 20-24 | 21.0 | 1,046 | 1,027 | 21.3 | 886 | 878 |
| 25-29 | 14.6 | 729 | 732 | 15.0 | 624 | 639 |
| 30-34 | 12.3 | 616 | 630 | 10.4 | 431 | 449 |
| 35-39 | 10.1 | 503 | 508 | 8.8 | 367 | 395 |
| 40-44 | 8.8 | 438 | 442 | 6.5 | 269 | 284 |
| 45-49 | 7.7 | 383 | 383 | 6.2 | 256 | 254 |
| Religion |  |  |  |  |  |  |
| Charismatic | 17.8 | 887 | 898 | 10.8 | 448 | 443 |
| Protestant | 24.1 | 1,203 | 1,191 | 17.8 | 741 | 752 |
| Roman Catholic | 4.7 | 232 | 244 | 5.1 | 212 | 205 |
| Pentecostal | 3.8 | 191 | 195 | 2.4 | 99 | 103 |
| Zionist | 36.7 | 1,832 | 1,820 | 37.1 | 1,542 | 1,533 |
| Apostolic Sect | 7.3 | 365 | 356 | 6.1 | 252 | 248 |
| None | 4.0 | 197 | 203 | 18.7 | 775 | 780 |
| Other | 1.5 | 76 | 77 | 2.0 | 86 | 90 |
| Marital status |  |  |  |  |  |  |
| Never married | 49.9 | 2,487 | 2,486 | 65.8 | 2,734 | 2,680 |
| Married | 31.9 | 1,589 | 1,581 | 23.3 | 970 | 1,032 |
| Living together | 9.5 | 473 | 488 | 6.0 | 249 | 249 |
| Divorced/separated | 3.2 | 161 | 159 | 3.5 | 145 | 141 |
| Widowed | 5.6 | 277 | 273 | 1.4 | 58 | 54 |
| Residence |  |  |  |  |  |  |
| Urban | 26.7 | 1,330 | 1,544 | 28.4 | 1,181 | 1,441 |
| Rural | 73.3 | 3,657 | 3,443 | 71.6 | 2,975 | 2,715 |
| Region |  |  |  |  |  |  |
| Hhohho | 26.9 | 1,340 | 1,263 | 26.5 | 1,099 | 1,019 |
| Manzini | 33.0 | 1,647 | 1,475 | 32.5 | 1,349 | 1,186 |
| Shiselweni | 20.7 | 1,033 | 1,083 | 20.3 | 843 | 838 |
| Lubombo | 19.4 | 966 | 1,166 | 20.8 | 865 | 1,113 |
| Education |  |  |  |  |  |  |
| No education | 8.1 | 402 | 413 | 7.6 | 316 | 332 |
| Lower primary | 7.2 | 360 | 374 | 11.3 | 470 | 457 |
| Higher primary | 25.4 | 1,268 | 1,262 | 23.6 | 980 | 971 |
| Secondary | 33.9 | 1,693 | 1,647 | 28.6 | 1,191 | 1,180 |
| High school | 17.9 | 894 | 894 | 20.5 | 852 | 838 |
| Tertiary | 7.4 | 370 | 397 | 8.3 | 347 | 378 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 15.7 | 785 | 778 | 14.5 | 601 | 585 |
| Second | 17.3 | 862 | 857 | 16.0 | 665 | 639 |
| Middle | 19.4 | 968 | 934 | 20.6 | 856 | 787 |
| Fourth | 22.3 | 1,111 | 1,059 | 22.9 | 953 | 922 |
| Highest | 25.3 | 1,262 | 1,359 | 26.0 | 1,081 | 1,223 |
| Total 15-49 | 100.0 | 4,987 | 4,987 | 100.0 | 4,156 | 4,156 |
| Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Total includes three women and two men with information missing on religion. |  |  |  |  |  |  |

Table 3.1.2 Background characteristics of respondents: Youth age 12-14
Percent distribution of girls and boys age 12-14 by selected background characteristics, Swaziland 2006-07

| Background characteristic | Girls age 12-14 |  |  | Boys age 12-14 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted percent | Weighted number | Unweighted number | Weighted percent | Weighted number | Unweighted number |
| Age |  |  |  |  |  |  |
| 12 | 31.3 | 146 | 152 | 33.8 | 138 | 139 |
| 13 | 33.1 | 154 | 146 | 31.9 | 130 | 130 |
| 14 | 35.5 | 165 | 161 | 34.3 | 140 | 142 |
| Residence |  |  |  |  |  |  |
| Urban | 12.2 | 57 | 75 | 11.7 | 48 | 55 |
| Rural | 87.8 | 408 | 384 | 88.3 | 361 | 356 |
| Region |  |  |  |  |  |  |
| Hhohho | 25.2 | 117 | 113 | 27.1 | 111 | 110 |
| Manzini | 29.5 | 137 | 130 | 28.7 | 117 | 112 |
| Shiselweni | 24.8 | 116 | 110 | 23.9 | 98 | 95 |
| Lubombo | 20.5 | 95 | 106 | 20.2 | 83 | 94 |
| Education |  |  |  |  |  |  |
| No education | * | 7 | 9 | * | 13 | 13 |
| Lower primary | 27.7 | 129 | 125 | 42.6 | 174 | 176 |
| Higher primary | 60.6 | 282 | 280 | 49.5 | 202 | 201 |
| Secondary + | (10.2) | 47 | 45 | * | 20 | 21 |
| Total 12-14 | 100.0 | 465 | 459 | 100.0 | 409 | 411 |

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table 3.1.3 Background characteristics of respondents: Older adults age 50+
Percent distribution of women and men age 50 and over by selected background characteristics, Swaziland 2006-07

| Background characteristic | Women age 50+ |  |  | Men age 50+ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted percent | Weighted number | Unweighted number | Weighted percent | Weighted number | Unweighted number |
| Age |  |  |  |  |  |  |
| 50-54 | 24.6 | 164 | 164 | 26.0 | 116 | 126 |
| 55-59 | 16.8 | 112 | 111 | 18.0 | 80 | 87 |
| 60+ | 58.7 | 392 | 386 | 56.0 | 249 | 243 |
| Residence |  |  |  |  |  |  |
| Urban | 12.9 | 86 | 104 | 17.7 | 79 | 96 |
| Rural | 87.1 | 583 | 557 | 82.3 | 365 | 360 |
| Region |  |  |  |  |  |  |
| Hhohho | 25.0 | 167 | 158 | 28.6 | 127 | 125 |
| Manzini | 31.3 | 209 | 193 | 30.6 | 136 | 133 |
| Shiselweni | 27.8 | 186 | 186 | 22.0 | 98 | 100 |
| Lubombo | 15.9 | 107 | 124 | 18.9 | 84 | 98 |
| Education |  |  |  |  |  |  |
| No education | 41.4 | 277 | 275 | 38.4 | 171 | 175 |
| Lower primary | 22.5 | 151 | 141 | 18.1 | 80 | 80 |
| Higher primary | 22.2 | 149 | 147 | 19.2 | 85 | 84 |
| Secondary | 9.0 | 60 | 60 | 13.5 | 60 | 63 |
| High school + | (1.0) | 31 | 37 | 3.1 | 47 | 53 |
| Total 50+ | 100.0 | 669 | 661 | 100.0 | 444 | 456 |

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Figure in parentheses is based on 25-49 unweighted cases.

### 3.2 Educational Attainment by Background Characteristics

Tables 3.2.1 and 3.2.2 present an overview of the relationship between the respondent's level of education and other background characteristics. Table 3.2.1 shows that younger people are better educated than older people; while 19 percent of women age 15-24 have attended high school, the corresponding proportion for women age 45-49 is only 5 percent. Urban women, women in Manzini and Hhohho, and women in the highest wealth quintile are better educated than other women. Among urban women, 24 percent have completed secondary education compared with 16 percent of their rural counterparts. Also, women in urban areas are four times more likely to have attained tertiary education (16 percent) compared with women in rural areas (4 percent). Across regions, women in Lubombo are the least educated.

| Table 3.2.1 Educational attainment by background characteristics: Women 15-49 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |
|  | Highest educational level |  |  |  |  |  |  | Median years completed | Number of women |
| Background characteristic | No education | Lower primary | Higher primary | Secondary | High school | Tertiary | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 3.7 | 6.0 | 27.4 | 41.9 | 18.6 | 2.4 | 100.0 | 7.9 | 2,320 |
| 15-19 | 2.1 | 6.5 | 33.4 | 45.2 | 12.3 | 0.5 | 100.0 | 7.5 | 1,274 |
| 20-24 | 5.6 | 5.3 | 20.2 | 37.9 | 26.2 | 4.8 | 100.0 | 8.6 | 1,046 |
| 25-29 | 7.1 | 5.0 | 19.7 | 28.0 | 28.7 | 11.5 | 100.0 | 9.0 | 729 |
| 30-34 | 8.5 | 6.2 | 23.7 | 28.8 | 19.6 | 13.3 | 100.0 | 8.6 | 616 |
| 35-39 | 10.9 | 10.7 | 24.8 | 27.1 | 12.9 | 13.7 | 100.0 | 7.8 | 503 |
| 40-44 | 16.5 | 11.8 | 25.1 | 25.3 | 10.9 | 10.4 | 100.0 | 6.6 | 438 |
| 45-49 | 22.4 | 11.0 | 28.3 | 24.2 | 5.4 | 8.6 | 100.0 | 6.0 | 383 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 5.1 | 3.9 | 17.5 | 32.7 | 24.4 | 16.4 | 100.0 | 9.3 | 1,330 |
| Rural | 9.2 | 8.4 | 28.3 | 34.4 | 15.6 | 4.2 | 100.0 | 7.4 | 3,657 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 8.1 | 5.7 | 23.4 | 35.9 | 17.4 | 9.5 | 100.0 | 8.3 | 1,340 |
| Manzini | 5.1 | 5.5 | 24.5 | 34.1 | 21.3 | 9.5 | 100.0 | 8.5 | 1,647 |
| Shiselweni | 5.9 | 7.0 | 28.3 | 36.2 | 18.5 | 4.2 | 100.0 | 7.8 | 1,033 |
| Lubombo | 15.4 | 12.5 | 26.8 | 28.6 | 12.4 | 4.4 | 100.0 | 6.5 | 966 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 18.9 | 18.1 | 33.5 | 22.5 | 7.0 | 0.0 | 100.0 | 5.4 | 785 |
| Second | 13.2 | 10.2 | 33.3 | 32.0 | 10.8 | 0.5 | 100.0 | 6.5 | 862 |
| Middle | 5.8 | 6.8 | 31.7 | 38.4 | 15.9 | 1.3 | 100.0 | 7.5 | 968 |
| Fourth | 4.6 | 3.7 | 21.8 | 42.4 | 23.9 | 3.7 | 100.0 | 8.7 | 1,111 |
| Highest | 2.6 | 1.8 | 13.4 | 31.5 | 26.0 | 24.7 | 100.0 | 10.1 | 1,262 |
| Total | 8.1 | 7.2 | 25.4 | 33.9 | 17.9 | 7.4 | 100.0 | 8.0 | 4,987 |

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

Table 3.2.2 shows that the pattern for men is similar to that for women. For example, urban men, men in Manzini and Hhohho, and men in the highest wealth quintile are also better educated than other men. The median years of schooling completed for women and men is also similar- 8.0 years for women and 7.9 years for men.

Table 3.2.2 Educational attainment by background characteristics: Men 15-49
Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Swaziland 2006-07

| Background characteristic | Highest educational level |  |  |  |  |  | Total | Median years completed | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { No } \\ \text { education } \end{gathered}$ | Lower primary | Higher primary | Secondary | $\begin{gathered} \text { High } \\ \text { school } \end{gathered}$ | Tertiary |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 3.7 | 12.7 | 28.5 | 34.4 | 18.4 | 2.4 | 100.0 | 7.5 | 2,209 |
| 15-19 | 3.2 | 14.5 | 34.8 | 37.3 | 10.0 | 0.2 | 100.0 | 6.8 | 1,323 |
| 20-24 | 4.3 | 9.9 | 19.1 | 30.0 | 30.9 | 5.7 | 100.0 | 8.7 | 886 |
| 25-29 | 8.2 | 6.8 | 16.9 | 27.6 | 29.8 | 10.7 | 100.0 | 9.0 | 624 |
| 30-34 | 8.2 | 12.0 | 16.8 | 16.3 | 32.6 | 14.1 | 100.0 | 9.6 | 431 |
| 35-39 | 12.2 | 11.6 | 19.3 | 22.1 | 14.9 | 20.0 | 100.0 | 8.2 | 367 |
| 40-44 | 18.1 | 8.4 | 19.5 | 20.6 | 12.8 | 20.7 | 100.0 | 8.1 | 269 |
| 45-49 | 21.9 | 11.8 | 19.4 | 20.2 | 12.2 | 14.4 | 100.0 | 6.6 | 256 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 6.2 | 6.2 | 15.1 | 27.1 | 27.2 | 18.1 | 100.0 | 9.5 | 1,181 |
| Rural | 8.2 | 13.3 | 27.0 | 29.3 | 17.8 | 4.5 | 100.0 | 7.2 | 2,975 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 8.5 | 8.6 | 20.6 | 30.9 | 21.8 | 9.6 | 100.0 | 8.4 | 1,099 |
| Manzini | 5.2 | 8.2 | 23.0 | 28.0 | 24.2 | 11.4 | 100.0 | 8.5 | 1,349 |
| Shiselweni | 5.6 | 14.6 | 25.9 | 31.2 | 19.0 | 3.6 | 100.0 | 7.4 | 843 |
| Lubombo | 12.2 | 16.5 | 25.9 | 24.3 | 14.5 | 6.6 | 100.0 | 6.4 | 865 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 17.5 | 25.1 | 32.7 | 18.3 | 6.4 | 0.0 | 100.0 | 4.7 | 601 |
| Second | 8.7 | 14.2 | 31.7 | 31.1 | 14.0 | 0.3 | 100.0 | 6.6 | 665 |
| Middle | 6.0 | 12.9 | 29.7 | 32.9 | 17.1 | 1.4 | 100.0 | 7.1 | 856 |
| Fourth | 5.9 | 8.1 | 21.4 | 33.6 | 25.2 | 5.7 | 100.0 | 8.4 | 953 |
| Highest | 4.2 | 3.3 | 10.7 | 25.2 | 30.8 | 25.7 | 100.0 | 11.0 | 1,081 |
| Total 15-49 | 7.6 | 11.3 | 23.6 | 28.6 | 20.5 | 8.3 | 100.0 | 7.9 | 4,156 |

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

### 3.3 LITERACY

The ability to read and write is an important personal asset, allowing individuals increased opportunities in life. Knowing the distribution of the literate population can facilitate programme managers, especially in health and family planning, in designing messages to reach women and men. The 2006-07 SDHS assessed the ability to read among women and men who had never been to school or who had attended only the primary level by asking respondents to read a simple and short sentence. ${ }^{2}$ Tables 3.3.1 and 3.3.2 show the percent distribution of female and male respondents, by level of literacy and percent literate according to background characteristics.

Overall, 91 percent of Swazi women age 15-49 are literate. Six in ten women have attended secondary or higher education and among those who have no education or had attended or are attending primary school, 32 percent can read a whole sentence or part of a sentence. Younger women, women in urban areas, and those who are in the highest wealth quintile are more likely to be literate than other women. The literacy rate is lowest among women in Lubombo.

Table 3.3.2 shows that the pattern for men is similar to that for women. For example, literacy rates are higher for younger men, urban men, and men in the highest wealth quintile than for other men. Across regions, men in Lubombo also have the lowest literacy rate.

[^2]| Table 3.3.1 Literacy: Women 15-49 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |
|  |  | No schooling or primary school |  |  |  |  |  | Percentage literate ${ }^{1}$ | Number |
| Background characteristic | Secondary school or higher | Can read a whole sentence | Can read part of a sentence | Cannot read at all | $\begin{gathered} \text { Blind/ } \\ \text { visually } \\ \text { impaired } \end{gathered}$ | Missing | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 58.0 | 33.0 | 4.7 | 3.4 | 0.0 | 0.9 | 100.0 | 95.7 | 1,274 |
| 20-24 | 68.9 | 20.0 | 4.3 | 6.4 | 0.1 | 0.4 | 100.0 | 93.2 | 1,046 |
| 25-29 | 68.2 | 18.2 | 5.5 | 7.5 | 0.2 | 0.5 | 100.0 | 91.9 | 729 |
| 30-34 | 61.6 | 24.1 | 6.6 | 6.7 | 0.1 | 0.9 | 100.0 | 92.3 | 616 |
| 35-39 | 53.7 | 26.4 | 9.6 | 9.8 | 0.2 | 0.3 | 100.0 | 89.7 | 503 |
| 40-44 | 46.6 | 29.3 | 8.2 | 15.5 | 0.2 | 0.2 | 100.0 | 84.1 | 438 |
| 45-49 | 38.3 | 30.5 | 10.5 | 18.3 | 1.9 | 0.4 | 100.0 | 79.4 | 383 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 73.5 | 16.2 | 4.4 | 4.9 | 0.0 | 1.1 | 100.0 | 94.0 | 1,330 |
| Rural | 54.1 | 29.3 | 6.9 | 9.0 | 0.3 | 0.4 | 100.0 | 90.3 | 3,657 |
| Region 62.8 |  |  |  |  |  |  |  |  |  |
| Hhohho | 62.8 | 23.0 | 6.8 | 7.0 | 0.0 | 0.4 | 100.0 | 92.6 | 1,340 |
| Manzini | 64.9 | 23.6 | 5.0 | 5.3 | 0.2 | 1.1 | 100.0 | 93.5 | 1,647 |
| Shiselweni | 58.9 | 28.0 | 5.9 | 6.1 | 0.8 | 0.2 | 100.0 | 92.8 | 1,033 |
| Lubombo | 45.3 | 31.2 | 7.8 | 15.3 | 0.2 | 0.2 | 100.0 | 84.3 | 966 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 29.5 | 36.3 | 12.8 | 20.9 | 0.1 | 0.3 | 100.0 | 78.6 | 785 |
| Second | 43.3 | 35.8 | 8.1 | 11.5 | 0.9 | 0.4 | 100.0 | 87.2 | 862 |
| Middle | 55.6 | 31.2 | 6.3 | 5.7 | 0.3 | 0.8 | 100.0 | 93.1 | 968 |
| Fourth | 70.0 | 21.6 | 3.7 | 4.3 | 0.1 | 0.3 | 100.0 | 95.3 | 1,111 |
| Highest | 82.2 | 12.0 | 2.9 | 2.1 | 0.0 | 0.8 | 100.0 | 97.1 | 1,262 |
| Total | 59.3 | 25.8 | 6.2 | 7.9 | 0.3 | 0.6 | 100.0 | 91.3 | 4,987 |

## Table 3.3.2 Literacy: Men 15-49

Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Swaziland 2006-07

| Background characteristic | Secondary school or higher | No schooling or primary school |  |  |  |  |  | Total | Percentage literate ${ }^{1}$ | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Can read a whole sentence | Can read part of a sentence | Cannot read at all | No card with required language | Blind/ visually impaired | Missing |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 47.5 | 34.5 | 8.6 | 8.9 | 0.1 | 0.1 | 0.4 | 100.0 | 90.5 | 1,323 |
| 20-24 | 66.6 | 17.3 | 7.3 | 8.0 | 0.3 | 0.0 | 0.4 | 100.0 | 91.3 | 886 |
| 25-29 | 68.1 | 17.2 | 7.0 | 7.0 | 0.3 | 0.1 | 0.2 | 100.0 | 92.3 | 624 |
| 30-34 | 63.0 | 19.4 | 7.9 | 9.3 | 0.0 | 0.2 | 0.3 | 100.0 | 90.2 | 431 |
| 35-39 | 57.0 | 22.6 | 10.0 | 10.0 | 0.0 | 0.0 | 0.4 | 100.0 | 89.6 | 367 |
| 40-44 | 54.0 | 19.8 | 8.7 | 17.0 | 0.5 | 0.0 | 0.0 | 100.0 | 82.5 | 269 |
| 45-49 | 46.9 | 21.5 | 11.1 | 19.1 | 0.0 | 0.8 | 0.6 | 100.0 | 79.5 | 256 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 72.5 | 15.3 | 5.3 | 6.6 | 0.2 | 0.0 | 0.1 | 100.0 | 93.2 | 1,181 |
| Rural | 51.5 | 27.3 | 9.5 | 10.9 | 0.2 | 0.2 | 0.5 | 100.0 | 88.3 | 2,975 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 62.3 | 21.0 | 8.3 | 7.8 | 0.1 | 0.2 | 0.3 | 100.0 | 91.6 | 1,099 |
| Manzini | 63.6 | 20.8 | 6.3 | 8.5 | 0.3 | 0.2 | 0.3 | 100.0 | 90.7 | 1,349 |
| Shiselweni | 53.8 | 26.5 | 10.3 | 9.0 | 0.0 | 0.0 | 0.3 | 100.0 | 90.6 | 843 |
| Lubombo | 45.4 | 29.7 | 9.4 | 14.7 | 0.2 | 0.0 | 0.5 | 100.0 | 84.5 | 865 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 24.7 | 39.8 | 12.7 | 21.6 | 0.1 | 0.1 | 0.8 | 100.0 | 77.3 | 601 |
| Second | 45.4 | 32.3 | 9.6 | 11.9 | 0.2 | 0.3 | 0.4 | 100.0 | 87.3 | 665 |
| Middle | 51.4 | 28.0 | 10.2 | 9.9 | 0.2 | 0.1 | 0.1 | 100.0 | 89.6 | 856 |
| Fourth | 64.6 | 19.0 | 8.0 | 7.5 | 0.2 | 0.1 | 0.7 | 100.0 | 91.5 | 953 |
| Highest | 81.7 | 10.8 | 3.8 | 3.5 | 0.1 | 0.0 | 0.0 | 100.0 | 96.4 | 1,081 |
| Total 15-49 | 57.5 | 23.9 | 8.3 | 9.7 | 0.2 | 0.1 | 0.4 | 100.0 | 89.6 | 4,156 |

${ }^{1}$ Refers to men who attended secondary school or higher and men who can read a whole sentence or part of a sentence

The 2006-07 SDHS also assessed literacy among youth age 12-14 and older adults age 50 and older. Table 3.3.3 shows the extent of literacy among children age 12-14. Overall, 97 percent of girls age 12-14 and 88 percent of boys of the same age are literate. For both girls and boys, there are virtually no differences in literacy level across age, urban-rural residence, and region.

Table 3.3.3 Literacy: Youth age 12-14
Percent distribution of girls and boys age 12-14 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Swaziland 2006-07

| Background characteristic | Secondary school or higher | No schooling or primary school |  |  |  |  |  | Percentage literate ${ }^{1}$ | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Can read a whole sentence | Can read part of a sentence | Cannot read at all | No card with required language | Missing | Total |  |  |
| GIRLS AGE 12-14 |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 12 | 0.6 | 75.0 | 21.3 | 3.1 | 0.0 | 0.0 | 100.0 | 96.9 | 146 |
| 13 | 7.8 | 79.9 | 8.7 | 3.0 | 0.0 | 0.6 | 100.0 | 96.4 | 154 |
| 14 | 20.8 | 68.8 | 7.2 | 2.8 | 0.0 | 0.5 | 100.0 | 96.8 | 165 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 21.2 | 74.0 | 2.9 | 0.6 | 0.0 | 1.3 | 100.0 | 98.1 | 57 |
| Rural | 8.6 | 74.5 | 13.4 | 3.3 | 0.0 | 0.2 | 100.0 | 96.5 | 408 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 7.8 | 79.1 | 9.8 | 3.4 | 0.0 | 0.0 | 100.0 | 96.6 | 117 |
| Manzini | 13.4 | 71.7 | 13.4 | 0.9 | 0.0 | 0.5 | 100.0 | 98.5 | 137 |
| Shiselweni | 10.4 | 69.8 | 17.6 | 2.2 | 0.0 | 0.0 | 100.0 | 97.8 | 116 |
| Lubombo | 8.1 | 78.2 | 6.4 | 6.3 | 0.0 | 1.0 | 100.0 | 92.7 | 95 |
| Total 12-14 | 10.2 | 74.4 | 12.1 | 3.0 | 0.0 | 0.4 | 100.0 | 96.7 | 465 |


| BOYS AGE 12-14 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |
| 12 | 0.0 | 65.5 | 16.1 | 17.8 | 0.6 | 0.0 | 100.0 | 81.6 | 138 |
| 13 | 3.9 | 74.5 | 14.5 | 7.1 | 0.0 | 0.0 | 100.0 | 92.9 | 130 |
| 14 | 10.5 | 63.7 | 14.5 | 10.6 | 0.0 | 0.7 | 100.0 | 88.7 | 140 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 8.6 | 66.7 | 11.8 | 12.9 | 0.0 | 0.0 | 100.0 | 87.1 | 48 |
| Rural | 4.4 | 67.9 | 15.5 | 11.8 | 0.2 | 0.3 | 100.0 | 87.7 | 361 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 2.2 | 67.4 | 16.1 | 13.4 | 0.0 | 0.8 | 100.0 | 85.8 | 111 |
| Manzini | 3.9 | 71.9 | 13.2 | 11.1 | 0.0 | 0.0 | 100.0 | 88.9 | 117 |
| Shiselweni | 8.1 | 67.4 | 18.5 | 5.1 | 0.9 | 0.0 | 100.0 | 94.0 | 98 |
| Lubombo | 5.9 | 62.7 | 12.1 | 19.2 | 0.0 | 0.0 | 100.0 | 80.8 | 83 |
| Total 12-14 | 4.9 | 67.7 | 15.0 | 11.9 | 0.2 | 0.2 | 100.0 | 87.6 | 409 |

${ }^{1}$ Refers to girls and boys who attended secondary school or higher and those who can read a whole sentence or part of a sentence

Table 3.3.4 shows the extent of literacy among older adults age 50 and older. In this age group, men are more likely than women to be literate ( 61 percent compared with 51 percent, respectively). As is the case with the population under age 50, among older adults age 50 and older, those who are younger, living in urban areas, and in the highest wealth quintile are more likely to be literate than other respondents. The literacy rate is lowest among women age 50 and older in Lubombo ( 36 percent) and men age 50 and older in Shiselweni (55 percent).

Table 3.3.4 Literacy: Older adults age 50+
Percent distribution of women and men age 50+ by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, Swaziland 2006-07

| Background characteristic | No schooling or primary school |  |  |  |  |  |  |  | Percentage literate ${ }^{1}$ | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Secondary school or higher | Can read a whole sentence | Can read part of a sentence | Cannot read at all | No card with required language | Blind/ visually impaired | Missing | Total |  |  |
| WOMEN AGE 50+ |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 50-54 | 22.1 | 30.1 | 15.6 | 26.9 | 0.8 | 3.9 | 0.6 | 100.0 | 67.9 | 164 |
| 55-59 | 26.2 | 31.6 | 13.4 | 24.2 | 0.0 | 4.5 | 0.0 | 100.0 | 71.3 | 112 |
| 60+ | 6.5 | 15.4 | 16.4 | 49.5 | 0.0 | 12.2 | 0.0 | 100.0 | 38.3 | 392 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 34.8 | 34.7 | 12.5 | 14.0 | 0.0 | 3.9 | 0.0 | 100.0 | 82.1 | 86 |
| Rural | 10.5 | 19.8 | 16.2 | 43.5 | 0.2 | 9.6 | 0.2 | 100.0 | 46.5 | 583 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 16.9 | 26.1 | 12.5 | 36.5 | 0.7 | 6.7 | 0.5 | 100.0 | 55.5 | 167 |
| Manzini | 18.3 | 21.1 | 21.2 | 33.0 | 0.0 | 6.5 | 0.0 | 100.0 | 60.5 | 209 |
| Shiselweni | 9.0 | 21.4 | 15.1 | 39.9 | 0.0 | 14.7 | 0.0 | 100.0 | 45.5 | 186 |
| Lubombo | 7.5 | 16.8 | 11.2 | 57.6 | 0.0 | 6.9 | 0.0 | 100.0 | 35.5 | 107 |
| Total 50+ | 13.6 | 21.7 | 15.7 | 39.7 | 0.2 | 8.9 | 0.1 | 100.0 | 51.1 | 669 |
|  |  |  |  | MEN | N AGE 50+ |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 50-54 | 43.4 | 17.1 | 12.6 | 20.3 | 0.9 | 4.9 | 0.8 | 100.0 | 73.1 | 116 |
| 55-59 | 31.1 | 27.9 | 17.0 | 17.3 | 0.0 | 6.7 | 0.0 | 100.0 | 76.0 | 80 |
| 60+ | 12.8 | 21.3 | 16.6 | 40.6 | 0.0 | 8.4 | 0.3 | 100.0 | 50.7 | 249 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 51.9 | 22.8 | 13.3 | 7.9 | 0.0 | 4.1 | 0.0 | 100.0 | 88.0 | 79 |
| Rural | 18.0 | 21.1 | 16.1 | 36.2 | 0.3 | 7.9 | 0.4 | 100.0 | 55.2 | 365 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 25.2 | 17.6 | 17.2 | 34.2 | 0.0 | 5.2 | 0.7 | 100.0 | 59.9 | 127 |
| Manzini | 34.0 | 18.3 | 14.0 | 22.9 | 0.8 | 10.1 | 0.0 | 100.0 | 66.2 | 136 |
| Shiselweni | 14.6 | 23.3 | 16.8 | 36.7 | 0.0 | 8.6 | 0.0 | 100.0 | 54.7 | 98 |
| Lubombo | 17.3 | 29.9 | 14.6 | 33.3 | 0.0 | 4.0 | 0.9 | 100.0 | 61.8 | 84 |
| Total 50+ | 24.0 | 21.4 | 15.6 | 31.2 | 0.2 | 7.2 | 0.4 | 100.0 | 61.0 | 444 |

${ }^{1}$ Refers to women and men who attended secondary school or higher and those who can read a whole sentence or part of a sentence

### 3.4 Access to Mass Media

Information access is essential in increasing people's knowledge and awareness of what is taking place around them, which may eventually affect their perceptions and behaviour. It is important to know the types of persons who are more or less likely to be reached by the media for purposes of planning programmes intended to spread information about health and family planning. In the survey, exposure to the media was assessed by asking how often a respondent reads a newspaper, watches television, or listens to a radio. Tables 3.4.1 to 3.4.4 show the percentage of females, males, youth, and older adults who were exposed to different types of media at least once a week by age, urban-rural residence, region, level of education, and wealth quintile.

| Table 3.4.1 Exposure to mass media: Women 15-49 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| Background characteristic | Reads a newspaper at least once a week | Watches television at least once a week | Listens to the radio at least once a week | All three <br> media <br> at least <br> once a week | No media at least once a week | Number |
| Age |  |  |  |  |  |  |
| 15-19 | 60.8 | 37.9 | 77.1 | 25.6 | 10.6 | 1,274 |
| 20-24 | 51.5 | 40.0 | 73.2 | 22.5 | 14.7 | 1,046 |
| 25-29 | 50.9 | 38.4 | 74.1 | 25.6 | 14.7 | 729 |
| 30-34 | 51.6 | 41.1 | 75.6 | 24.1 | 13.1 | 616 |
| 35-39 | 46.5 | 36.8 | 71.8 | 21.9 | 17.1 | 503 |
| 40-44 | 46.0 | 32.7 | 74.7 | 19.9 | 15.8 | 438 |
| 45-49 | 36.7 | 28.1 | 71.2 | 15.7 | 22.2 | 383 |
| Residence |  |  |  |  |  |  |
| Urban | 63.9 | 57.4 | 75.5 | 36.0 | 9.3 | 1,330 |
| Rural | 47.2 | 30.3 | 74.1 | 18.4 | 16.2 | 3,657 |
| Region |  |  |  |  |  |  |
| Hhohho | 57.1 | 42.2 | 77.2 | 27.2 | 11.6 | 1,340 |
| Manzini | 57.7 | 41.9 | 75.0 | 25.9 | 12.2 | 1,647 |
| Shiselweni | 42.4 | 30.4 | 73.1 | 18.2 | 17.3 | 1,033 |
| Lubombo | 43.7 | 31.0 | 71.2 | 18.0 | 18.8 | 966 |
| Education |  |  |  |  |  |  |
| No education | 4.9 | 12.2 | 58.8 | 1.0 | 38.6 | 402 |
| Lower primary | 20.3 | 17.1 | 67.8 | 5.6 | 26.1 | 360 |
| Higher primary | 36.3 | 24.0 | 70.7 | 10.2 | 19.7 | 1,268 |
| Secondary | 59.5 | 40.2 | 79.3 | 26.0 | 9.8 | 1,693 |
| High school | 75.7 | 51.6 | 79.0 | 36.7 | 5.5 | 894 |
| Tertiary | 91.9 | 85.1 | 78.1 | 62.4 | 0.6 | 370 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 25.1 | 5.1 | 55.7 | 1.5 | 36.3 | 785 |
| Second | 35.1 | 9.5 | 69.8 | 4.3 | 21.2 | 862 |
| Middle | 48.4 | 18.3 | 75.8 | 9.7 | 14.2 | 968 |
| Fourth | 58.9 | 46.5 | 83.2 | 28.2 | 7.6 | 1,111 |
| Highest | 75.6 | 83.6 | 80.7 | 55.2 | 2.2 | 1,262 |
| Total | 51.7 | 37.5 | 74.5 | 23.1 | 14.4 | 4,987 |

Tables 3.4.1 and 3.4.2 show that in general, men are more exposed to mass media than women. The most popular mass media is radio broadcast, with 75 percent of women and 83 percent of men listening to the radio at least once a week. The next most accessed media is newspaper, with 52 percent of women and 61 percent of men reading a newspaper at least once a week. Thirty-eight percent of women and 45 percent of men watch television at least once a week. Overall, only 23 percent of women and 31 percent of men have access to all three types of media. Further, 14 percent of women and 7 percent of men have no contact with any media at any time of the week.

Younger women and men, those who live in urban areas, and those who live in Hhohho and Manzini are more likely to be exposed to mass media than other respondents. Access to mass media increases with education and wealth.

| Table 3.4.2 Exposure to mass media: Men 15-49 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| Background characteristic | Reads a newspaper at least once a week | Watches television at least once a week | Listens to the radio at least once a week | All three media at least once a week | No media at least once a week | Number |
| Age |  |  |  |  |  |  |
| 15-19 | 59.0 | 42.5 | 82.5 | 26.5 | 6.4 | 1,323 |
| 20-24 | 63.3 | 46.6 | 81.9 | 30.7 | 6.7 | 886 |
| 25-29 | 66.4 | 46.7 | 85.6 | 32.0 | 5.1 | 624 |
| 30-34 | 63.5 | 51.8 | 86.0 | 39.0 | 4.8 | 431 |
| 35-39 | 58.4 | 43.1 | 82.7 | 30.9 | 8.9 | 367 |
| 40-44 | 55.8 | 44.3 | 83.0 | 33.0 | 10.2 | 269 |
| 45-49 | 53.2 | 40.9 | 78.9 | 31.9 | 15.0 | 256 |
| Residence |  |  |  |  |  |  |
| Urban | 74.8 | 60.8 | 81.7 | 45.1 | 4.4 | 1,181 |
| Rural | 55.4 | 38.8 | 83.6 | 25.0 | 8.2 | 2,975 |
| Region |  |  |  |  |  |  |
| Hhohho | 65.4 | 45.6 | 83.4 | 33.2 | 6.0 | 1,099 |
| Manzini | 67.2 | 49.6 | 82.9 | 35.0 | 6.5 | 1,349 |
| Shiselweni | 50.9 | 40.9 | 85.0 | 25.5 | 7.9 | 843 |
| Lubombo | 55.0 | 41.2 | 80.9 | 25.8 | 8.6 | 865 |
| Education |  |  |  |  |  |  |
| No education | 8.0 | 21.9 | 74.7 | 3.1 | 21.7 | 316 |
| Lower primary | 21.5 | 25.7 | 80.3 | 7.5 | 15.5 | 470 |
| Higher primary | 47.4 | 32.9 | 83.1 | 17.5 | 9.1 | 980 |
| Secondary | 72.7 | 46.4 | 84.9 | 34.2 | 4.3 | 1,191 |
| High school | 86.9 | 60.1 | 85.8 | 49.2 | 1.3 | 852 |
| Tertiary | 95.9 | 84.9 | 80.9 | 66.9 | 0.7 | 347 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 31.9 | 15.5 | 77.6 | 8.2 | 17.5 | 601 |
| Second | 50.4 | 24.6 | 80.4 | 14.5 | 9.7 | 665 |
| Middle | 56.0 | 29.2 | 86.7 | 17.3 | 6.6 | 856 |
| Fourth | 65.5 | 50.1 | 84.2 | 32.6 | 5.5 | 953 |
| Highest | 83.2 | 82.2 | 83.7 | 62.0 | 1.5 | 1,081 |
| Total 15-49 | 60.9 | 45.0 | 83.0 | 30.7 | 7.1 | 4,156 |

Table 3.4.3 shows the exposure to mass media among girls and boys age 12-14 interviewed in the survey. As in the case for women and men age 15-49, radio is the most popular media ( 60 percent of girls and 71 percent of boys). Overall, only 14 percent of girls age 12-14 and 15 percent of boys age 12-14 have access to all three types of media. In contrast, 19 percent of girls age 12-14 and 16 percent of boys age 12-14 have no contact with any media at least once a week.

The pattern of exposure to mass media for youth age 12-14 is similar to that of women and men age 15-49. Younger girls and boys, those who live in urban areas, and those who live in Hhohho and Manzini are more likely to be exposed to mass media than other respondents. Access to mass media increases with education.

| Table 3.4.3 Exposure to mass media: Youth age 12-14 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Table 3.4.4 presents the exposure to mass media among older adults age 50 and older interviewed in the survey. As in the case of younger respondents, radio is the most popular media ( 60 percent of women and 77 percent of men). Overall, only 9 percent of women and 14 percent of men age 50 and older have access to all three types of media. In addition, 35 percent of women and 20 percent of men age 50 and older have no contact with any media at any time of the week.

The pattern of exposure to mass media for older adults is similar to that of younger women and men, except there is no clear pattern by age. Women and men who live in urban areas and those who live in Hhohho and Manzini are more likely to be exposed to mass media than other respondents. Access to mass media increases with education.

| Percentage of women and men age 50+ who are exposed to specific media on a weekly basis, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Reads a newspaper at least once a week | Watches television at least once a week | Listens to the radio at least once a week | All three media at least once a week | No media at least once a week | Number |
| WOMEN AGE 50+ |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| 50-54 | 14.7 | 14.8 | 53.4 | 3.7 | 40.8 | 254 |
| 55-59 | 22.2 | 28.8 | 63.3 | 11.9 | 30.7 | 233 |
| $60+$ | 23.1 | 19.4 | 62.6 | 12.1 | 31.3 | 179 |
| Residence |  |  |  |  |  |  |
| Urban | 40.2 | 53.6 | 71.1 | 22.9 | 14.7 | 86 |
| Rural | 16.6 | 16.2 | 57.8 | 6.9 | 37.5 | 583 |
| Region |  |  |  |  |  |  |
| Hhohho | 25.1 | 28.9 | 64.3 | 13.9 | 29.2 | 167 |
| Manzini | 23.0 | 24.5 | 64.2 | 11.0 | 31.2 | 209 |
| Shiselweni | 12.8 | 12.5 | 54.6 | 3.9 | 40.0 | 186 |
| Lubombo | 16.7 | 16.8 | 51.2 | 6.0 | 40.2 | 107 |
| Education |  |  |  |  |  |  |
| No education | 3.7 | 12.0 | 50.0 | 1.5 | 45.8 | 277 |
| Lower primary | 13.7 | 10.7 | 52.2 | 0.8 | 42.2 | 151 |
| Higher primary | 25.1 | 23.4 | 68.1 | 6.1 | 24.1 | 149 |
| Secondary | 61.5 | 47.9 | 89.9 | 41.0 | 5.6 | 60 |
| High school + | (85.2) | (89.7) | (81.3) | (66.8) | 2.0 | 31 |
| Total 50+ | 19.7 | 21.0 | 59.5 | 9.0 | 34.6 | 669 |
|  |  | MEN | AGE 50+ |  |  |  |
| Age |  |  |  |  |  |  |
| 50-54 | 25.4 | 19.5 | 77.5 | 11.3 | 19.0 | 165 |
| 55-59 | 30.2 | 33.0 | 75.8 | 16.1 | 18.7 | 174 |
| $60+$ | 30.0 | 21.0 | 76.7 | 13.4 | 22.4 | 105 |
| Residence |  |  |  |  |  |  |
| Urban | 56.8 | 52.6 | 88.5 | 37.6 | 4.7 | 79 |
| Rural | 22.3 | 19.3 | 74.1 | 8.6 | 22.9 | 365 |
| Region |  |  |  |  |  |  |
| Hhohho | 35.2 | 26.8 | 83.5 | 18.3 | 11.7 | 127 |
| Manzini | 32.3 | 32.8 | 80.0 | 16.4 | 16.3 | 136 |
| Shiselweni | 17.0 | 13.5 | 70.9 | 4.8 | 27.4 | 98 |
| Lubombo | 25.1 | 24.1 | 67.3 | 12.6 | 28.2 | 84 |
| Education |  |  |  |  |  |  |
| No education | 3.0 | 9.9 | 67.2 | 0.6 | 31.5 | 171 |
| Lower primary | 15.3 | 9.2 | 69.8 | 0.8 | 25.6 | 80 |
| Higher primary | 36.5 | 29.2 | 87.5 | 15.3 | 9.7 | 85 |
| Secondary | 57.8 | 41.5 | 85.8 | 21.9 | 7.8 | 60 |
| High school + | (91.4) | (80.4) | (90.8) | (70.3) | (0.0) | 47 |
| Total 50+ | 28.4 | 25.2 | 76.6 | 13.7 | 19.7 | 444 |

Note: Figures in parentheses are based on 25-49 unweighted cases.

### 3.5 EMPLOYMENT

Male and female respondents age 15 and older were asked whether they were employed at the time of the survey and if not, whether they were employed in the 12 months preceding the survey. The measurement of employment, however, is difficult. The difficulty arises largely because some work, especially work on family farms, in family businesses, or in the informal sector, is often not perceived as employment, and hence not reported as such. To avoid underestimating respondents’ employment, the 2006-07 SDHS asked respondents several questions to probe for their employment status and to ensure complete coverage of employment in both the formal and informal sectors. Respondents were asked a number of questions to elicit their current employment status and continuity of employment in the 12 months prior to the survey. Employed individuals are those who said that they are currently working (i.e., worked in the past 7 days) and those who worked at any time during the 12 months prior to the survey.

Tables 3.5 .1 to 3.5 .3 show the percent distribution of 2006-07 SDHS adult respondents according to current and recent employment. Table 3.5.1 and Figure 3.1 show that four in ten women age 15-49 are currently employed, 4 percent are not currently employed but worked in the past 12 months, and 53 percent did not work in the past 12 months. The proportion of women who are currently employed varies by age, ranging from 9 percent for women age 15-19 to 57 percent or higher for women age 30 and older.

Women who have never been married, have no children, and are living in rural areas are less likely than other women to be employed. Women who are divorced or separated are more likely to be employed than women who have never married or are currently married or living together ( 62 percent for divorced or separated women, 49 percent for women who are married or living together, and 28 percent for never married women). More than half of women who have three or more living children are employed compared with 20 percent of women who have no living children. Women who reside in urban areas are much more likely to be employed than rural women. In three of the four regions, Hhohho, Manzini, and Lubombo, four in ten women are employed. In Shiselweni, only 27 percent of women are currently employed. Employment of women does not vary much by education and wealth status except if they have tertiary education or are in the highest wealth quintile.

The age pattern of employment for men is the same as that for women; older men are more likely than younger men to be employed. However, the pattern of employment for men by marital status is the reverse of that for women; married men, those living with women as spouses, are more likely to be employed than men who are divorced or separated ( 81 percent compared with 69 percent). The likelihood that a man holds a job increases with the number of living children he has; 33 percent of men who have no living children are currently employed, and at least 74 percent of men who have children are employed. This may be due to the social expectation that mature men provide for their families by working. As in the case of women, men in Hhohho, Manzini, and Lubombo are more likely to be employed than those in Shiselweni (52 percent or higher compared with 38 percent). The relationship between employment and education for men is U-shaped; high among men with the least education, declining with increasing education to reach the lowest for men with secondary education, and increasing to the highest proportion for men with tertiary education. The likelihood of men being employed increases with wealth; 36 percent of men in the lowest wealth quintile are employed compared with 64 percent of men in the highest wealth quintile.

| Table 3.5.1 Employment status: Women 15-49 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49 by employment status, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| Background characteristic | Employed in the 12 months preceding the survey |  | Not employed in the 12 months preceding the survey | Missing/ don't know | Total | Number of women |
|  | Currently employed $^{1}$ | Not currently employed |  |  |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 9.1 | 2.4 | 83.0 | 5.5 | 100.0 | 1,274 |
| 20-24 | 33.9 | 5.8 | 57.1 | 3.2 | 100.0 | 1,046 |
| 25-29 | 48.5 | 4.9 | 43.9 | 2.8 | 100.0 | 729 |
| 30-34 | 57.2 | 5.5 | 35.5 | 1.9 | 100.0 | 616 |
| 35-39 | 61.6 | 3.3 | 32.6 | 2.6 | 100.0 | 503 |
| 40-44 | 58.8 | 3.9 | 35.1 | 2.1 | 100.0 | 438 |
| 45-49 | 62.4 | 3.9 | 32.0 | 1.6 | 100.0 | 383 |
| Marital status |  |  |  |  |  |  |
| Never married | 28.3 | 3.9 | 63.9 | 3.9 | 100.0 | 2,487 |
| Married or living together | 48.7 | 4.3 | 43.7 | 3.2 | 100.0 | 2,062 |
| Divorced/separated/widowed | 62.4 | 4.8 | 32.3 | 0.5 | 100.0 | 438 |
| Number of living children |  |  |  |  |  |  |
| 0 | 19.6 | 4.1 | 71.4 | 4.9 | 100.0 | 1,601 |
| 1-2 | 45.2 | 4.7 | 47.7 | 2.4 | 100.0 | 1,754 |
| 3-4 | 54.9 | 3.2 | 39.5 | 2.3 | 100.0 | 887 |
| $5+$ | 52.3 | 4.2 | 40.6 | 2.9 | 100.0 | 745 |
| Residence |  |  |  |  |  |  |
| Urban | 56.2 | 2.4 | 38.9 | 2.5 | 100.0 | 1,330 |
| Rural | 33.8 | 4.8 | 57.8 | 3.6 | 100.0 | 3,657 |
| Region |  |  |  |  |  |  |
| Hhohho | 42.6 | 3.3 | 50.0 | 4.1 | 100.0 | 1,340 |
| Manzini | 43.7 | 2.8 | 50.9 | 2.6 | 100.0 | 1,647 |
| Shiselweni | 26.7 | 4.0 | 65.7 | 3.6 | 100.0 | 1,033 |
| Lubombo | 42.9 | 8.0 | 46.0 | 3.0 | 100.0 | 966 |
| Education |  |  |  |  |  |  |
| No education | 43.1 | 5.6 | 46.8 | 4.5 | 100.0 | 402 |
| Lower primary | 36.7 | 4.8 | 55.6 | 2.9 | 100.0 | 360 |
| Higher primary | 35.6 | 4.1 | 57.1 | 3.2 | 100.0 | 1,268 |
| Secondary | 34.7 | 4.0 | 57.7 | 3.7 | 100.0 | 1,693 |
| High school | 40.5 | 4.9 | 51.6 | 3.1 | 100.0 | 894 |
| Tertiary | 74.7 | 1.5 | 22.4 | 1.3 | 100.0 | 370 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 29.0 | 5.4 | 59.8 | 5.8 | 100.0 | 785 |
| Second | 28.7 | 4.6 | 63.1 | 3.5 | 100.0 | 862 |
| Middle | 33.2 | 4.6 | 59.9 | 2.4 | 100.0 | 968 |
| Fourth | 42.0 | 4.5 | 51.0 | 2.5 | 100.0 | 1,111 |
| Highest | 57.0 | 2.5 | 37.5 | 3.0 | 100.0 | 1,262 |
| Total 15-49 | 39.8 | 4.2 | 52.8 | 3.3 | 100.0 | 4,987 |
| 1 "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason. |  |  |  |  |  |  |

Figure 3.1 Women's Employment Status (past 12 months)


Not employed in the
12 months preceding
the survey

Comparisons between women and men show that women in general are less likely to be employed in the past 12 months than men ( 44 percent of men compared with 53 percent). The same is true for current employment; 40 percent for women and 50 percent for men.

Employment information on older adults age 50 and over is presented in Table 3.5.3. As expected, men are more likely to be employed than women ( 29 percent and 20 percent, respectively). For both women and men, employment decreases with age. While in general urban residents are more likely to be employed than rural residents, the difference for men is much more significant than for women. For men, the proportion working is 72 percent in urban areas and 20 percent in rural areas. For women, these proportions are 38 percent and 18 percent, respectively. For both men and women over 50 years old, the level of employment increases with an improvement in the level of education.

| Percent distribution of men age 15-49 |  | by employme | status, according to background |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Employed in precedin | 12 months the survey | Not employed in the 12 months |  |  |
| Background characteristic | Currently employed ${ }^{1}$ | Not currently employed | preceding the survey | Total | Number of men |
| Age |  |  |  |  |  |
| 15-19 | 16.6 | 3.2 | 80.2 | 100.0 | 1,323 |
| 20-24 | 45.3 | 8.2 | 46.5 | 100.0 | 886 |
| 25-29 | 72.4 | 7.0 | 20.6 | 100.0 | 624 |
| 30-34 | 77.2 | 6.3 | 16.5 | 100.0 | 431 |
| 35-39 | 81.0 | 3.7 | 15.3 | 100.0 | 367 |
| 40-44 | 79.2 | 3.9 | 16.9 | 100.0 | 269 |
| 45-49 | 70.5 | 6.3 | 23.2 | 100.0 | 256 |
| Marital status |  |  |  |  |  |
| Never married | 35.3 | 5.6 | 59.1 | 100.0 | 2,734 |
| Married or living together | 81.1 | 5.2 | 13.7 | 100.0 | 1,219 |
| Divorced/separated/widowed | 69.4 | 5.3 | 25.4 | 100.0 | 203 |
| Number of living children |  |  |  |  |  |
| 0 | 32.7 | 5.3 | 61.9 | 100.0 | 2,500 |
| 1-2 | 77.7 | 6.0 | 16.3 | 100.0 | 835 |
| 3-4 | 73.8 | 5.9 | 20.3 | 100.0 | 424 |
| $5+$ | 79.7 | 4.3 | 15.9 | 100.0 | 397 |
| Residence |  |  |  |  |  |
| Urban | 69.6 | 3.2 | 27.2 | 100.0 | 1,181 |
| Rural | 42.8 | 6.3 | 50.8 | 100.0 | 2,975 |
| Region |  |  |  |  |  |
| Hhohho | 55.3 | 5.2 | 39.5 | 100.0 | 1,099 |
| Manzini | 51.6 | 4.9 | 43.5 | 100.0 | 1,349 |
| Shiselweni | 38.4 | 4.6 | 57.0 | 100.0 | 843 |
| Lubombo | 54.1 | 7.4 | 38.4 | 100.0 | 865 |
| Education |  |  |  |  |  |
| No education | 64.7 | 7.0 | 28.3 | 100.0 | 316 |
| Lower primary | 51.0 | 7.4 | 41.6 | 100.0 | 470 |
| Higher primary | 43.2 | 5.9 | 50.9 | 100.0 | 980 |
| Secondary | 41.0 | 4.5 | 54.6 | 100.0 | 1,191 |
| High school | 54.2 | 5.9 | 40.0 | 100.0 | 852 |
| Tertiary | 80.5 | 2.4 | 17.2 | 100.0 | 347 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 36.1 | 8.7 | 55.2 | 100.0 | 601 |
| Second | 39.0 | 7.0 | 54.0 | 100.0 | 665 |
| Middle | 45.0 | 6.9 | 48.1 | 100.0 | 856 |
| Fourth | 57.0 | 3.9 | 39.0 | 100.0 | 953 |
| Highest | 63.9 | 2.9 | 33.2 | 100.0 | 1,081 |
| Total 15-49 | 50.4 | 5.4 | 44.1 | 100.0 | 4,156 |
| 1 "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason. |  |  |  |  |  |

Table 3.5.3 Employment status: Older adults age 50+
Percent distribution of women and men age 50+ by employment status, according to background characteristics, Swaziland 2006-07

| Background characteristic | Employed in precedin | the 12 months the survey | Not employed in the 12 months preceding the survey | Missing/ don't know | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Currently employed | Not currently employed |  |  |  |  |
| WOMEN |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| 50-54 | 35.8 | 11.7 | 50.5 | 2.1 | 100.0 | 164 |
| 55-59 | 34.3 | 14.2 | 51.5 | 0.0 | 100.0 | 112 |
| 60+ | 9.9 | 12.6 | 76.4 | 1.1 | 100.0 | 392 |
| Residence |  |  |  |  |  |  |
| Urban | 37.7 | 7.9 | 54.4 | 0.0 | 100.0 | 86 |
| Rural | 17.8 | 13.4 | 67.5 | 1.3 | 100.0 | 583 |
| Region |  |  |  |  |  |  |
| Hhohho | 25.9 | 11.6 | 60.7 | 1.7 | 100.0 | 167 |
| Manzini | 24.4 | 12.4 | 62.9 | 0.3 | 100.0 | 209 |
| Shiselweni | 12.6 | 12.7 | 74.2 | 0.5 | 100.0 | 186 |
| Lubombo | 17.1 | 14.7 | 65.1 | 3.1 | 100.0 | 107 |
| Education |  |  |  |  |  |  |
| No education | 11.6 | 12.7 | 73.8 | 1.9 | 100.0 | 277 |
| Lower primary | 15.6 | 11.6 | 71.8 | 1.0 | 100.0 | 151 |
| Higher primary | 23.6 | 15.7 | 60.1 | 0.6 | 100.0 | 149 |
| Secondary | 41.8 | 9.9 | 48.3 | 0.0 | 100.0 | 60 |
| High school + | (64.7) | (8.5) | (26.8) | (0.0) | 100.0 | 31 |
| Total 50+ | 20.3 | 12.7 | 65.8 | 1.2 | 100.0 | 669 |
| MEN |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |
| 50-54 | 53.9 | 15.6 | 29.2 | 1.2 | 100.0 | 116 |
| 55-59 | 38.5 | 10.8 | 49.7 | 1.1 | 100.0 | 80 |
| 60+ | 15.1 | 15.9 | 66.9 | 2.1 | 100.0 | 249 |
| Residence |  |  |  |  |  |  |
| Urban | 71.8 | 5.4 | 21.6 | 1.3 | 100.0 | 79 |
| Rural | 20.3 | 17.0 | 61.0 | 1.8 | 100.0 | 365 |
| Region |  |  |  |  |  |  |
| Hhohho | 33.1 | 15.0 | 49.5 | 2.5 | 100.0 | 127 |
| Manzini | 33.3 | 14.3 | 51.1 | 1.2 | 100.0 | 136 |
| Shiselweni | 15.8 | 16.1 | 66.2 | 2.0 | 100.0 | 98 |
| Lubombo | 33.3 | 14.4 | 51.2 | 1.0 | 100.0 | 84 |
| Education |  |  |  |  |  |  |
| No education | 17.9 | 12.3 | 67.8 | 2.1 | 100.0 | 171 |
| Lower primary | 18.9 | 27.1 | 50.1 | 4.0 | 100.0 | 80 |
| Higher primary | 27.1 | 16.8 | 55.0 | 1.0 | 100.0 | 85 |
| Secondary | 46.7 | 10.9 | 42.3 | 0.0 | 100.0 | 60 |
| High school + | (70.2) | (5.3) | (24.5) | (0.0) | 100.0 | 47 |
| Total 50+ | 29.4 | 14.9 | 54.0 | 1.7 | 100.0 | 444 |

[^3] illness, vacation, or any other such reason.

### 3.6 OCCUPATION

Respondents who were currently employed were asked to state their occupation, and the results are presented in Tables 3.6.1 to 3.6.3. There are six occupational categories under which those currently employed are classified. They are: professional, technical, and managerial; clerical; sales and services; skilled manual; unskilled manual; and agricultural. The vast majority of currently employed women work in sales and services ( 56 percent). The next most popular occupations for women are skilled manual labour (14 percent); professional, technical, and managerial (12 percent); and agriculture ( 9 percent). Seven percent of women are employed in clerical jobs.

| Table 3.6.1 Occupation: Women 15-49 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |
| Background characteristic | Professional/ technical/ managerial | Clerical | Sales and services | Skilled manual | Unskilled manual | Agriculture | Missing | Total | Number of women |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 1.5 | 2.0 | 69.6 | 10.5 | 0.7 | 8.3 | 7.6 | 100.0 | 147 |
| 20-24 | 5.3 | 7.8 | 63.7 | 14.1 | 1.6 | 6.7 | 0.9 | 100.0 | 415 |
| 25-29 | 12.9 | 7.8 | 53.7 | 16.6 | 1.6 | 6.7 | 0.7 | 100.0 | 389 |
| 30-34 | 14.3 | 6.7 | 53.2 | 15.9 | 1.0 | 8.1 | 0.8 | 100.0 | 386 |
| 35-39 | 16.9 | 9.1 | 47.2 | 14.4 | 1.4 | 10.8 | 0.3 | 100.0 | 326 |
| 40-44 | 15.5 | 4.9 | 58.8 | 10.6 | 0.4 | 9.6 | 0.3 | 100.0 | 274 |
| 45-49 | 14.9 | 4.0 | 52.5 | 15.6 | 0.5 | 11.8 | 0.8 | 100.0 | 254 |
| Marital status |  |  |  |  |  |  |  |  |  |
| Never married | 8.1 | 8.2 | 60.4 | 15.2 | 1.3 | 5.2 | 1.7 | 100.0 | 803 |
| Married or living together | 15.5 | 5.9 | 52.8 | 13.7 | 1.3 | 10.0 | 0.9 | 100.0 | 1,094 |
| Divorced/separated/widowed | 10.2 | 4.9 | 56.8 | 14.9 | 0.2 | 12.4 | 0.6 | 100.0 | 294 |
| Number of living children |  |  |  |  |  |  |  |  |  |
| 0 | 9.4 | 6.1 | 59.2 | 14.5 | 1.4 | 6.9 | 2.6 | 100.0 | 379 |
| 1-2 | 15.1 | 7.8 | 53.7 | 14.5 | 1.1 | 6.5 | 1.2 | 100.0 | 875 |
| 3-4 | 13.4 | 9.2 | 53.1 | 14.6 | 0.7 | 8.7 | 0.2 | 100.0 | 516 |
| 5+ | 6.6 | 1.3 | 62.0 | 13.7 | 1.3 | 14.4 | 0.7 | 100.0 | 421 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 15.5 | 11.2 | 50.3 | 16.8 | 1.1 | 4.3 | 0.9 | 100.0 | 780 |
| Rural | 10.2 | 4.1 | 59.3 | 13.1 | 1.1 | 11.0 | 1.2 | 100.0 | 1,411 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 11.8 | 9.1 | 61.9 | 8.7 | 0.9 | 6.7 | 1.0 | 100.0 | 615 |
| Manzini | 14.5 | 6.8 | 50.6 | 22.2 | 1.3 | 3.6 | 1.0 | 100.0 | 766 |
| Shiselweni | 12.8 | 5.5 | 51.7 | 16.9 | 1.8 | 11.3 | 0.0 | 100.0 | 317 |
| Lubombo | 8.2 | 3.8 | 60.3 | 7.7 | 0.8 | 17.0 | 2.2 | 100.0 | 492 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 0.7 | 0.0 | 63.6 | 9.5 | 2.1 | 23.4 | 0.6 | 100.0 | 196 |
| Lower primary | 0.5 | 0.0 | 64.7 | 14.5 | 1.2 | 18.3 | 0.7 | 100.0 | 149 |
| Higher primary | 1.1 | 2.2 | 66.2 | 17.0 | 0.1 | 12.0 | 1.4 | 100.0 | 504 |
| Secondary | 4.4 | 3.8 | 66.1 | 16.4 | 2.2 | 5.9 | 1.3 | 100.0 | 654 |
| High school | 12.2 | 11.2 | 51.8 | 18.4 | 0.9 | 4.0 | 1.6 | 100.0 | 406 |
| Tertiary | 63.3 | 22.6 | 11.5 | 2.6 | 0.0 | 0.0 | 0.0 | 100.0 | 282 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 0.5 | 2.4 | 60.8 | 13.4 | 0.4 | 21.3 | 1.2 | 100.0 | 270 |
| Second | 1.4 | 2.4 | 65.4 | 13.6 | 0.7 | 14.9 | 1.6 | 100.0 | 288 |
| Middle | 4.2 | 3.8 | 60.7 | 17.4 | 1.8 | 9.9 | 2.2 | 100.0 | 366 |
| Fourth | 7.4 | 4.8 | 56.8 | 21.0 | 1.7 | 6.8 | 1.4 | 100.0 | 517 |
| Highest | 27.4 | 12.3 | 48.1 | 9.0 | 0.8 | 2.2 | 0.2 | 100.0 | 751 |
| Total | 12.1 | 6.6 | 56.1 | 14.4 | 1.1 | 8.6 | 1.1 | 100.0 | 2,191 |

Women's occupations vary with their background characteristics. In general, professional, technical, and managerial jobs attract women with the highest education and in the highest wealth quintile, and work in sales and services attracts younger women and women with lower than tertiary education. Women in Lubombo are more likely than women in other regions to work in agriculture.

While women tend to be concentrated in selected types of occupations, men's choice of work is more varied. Men are almost evenly employed in sales and services and as skilled manual labourers (29 percent and 32 percent, respectively). Seventeen percent of men work in agriculture and 13 percent are employed in professional, technical, and managerial jobs.

Men's occupations also vary with their background characteristics. In general, professional, technical, and managerial jobs attract married men, men in urban areas, men with the highest education, and men in the highest wealth quintile. On the other hand, young men, rural men, men in Lubombo, men with less education, and those in the lower wealth quintiles tend to work in agriculture.

## Table 3.6.2 Occupation: Men 15-49

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Swaziland 2006-07

| Background characteristic | Professional/ technical/ managerial | Clerical | Sales and services | Skilled manual | Unskilled manual | Agriculture | Missing | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 0.0 | 1.2 | 45.4 | 16.3 | 8.1 | 28.3 | 0.6 | 100.0 | 262 |
| 20-24 | 4.6 | 2.5 | 32.2 | 32.3 | 7.3 | 20.2 | 0.8 | 100.0 | 474 |
| 25-29 | 11.2 | 2.5 | 28.4 | 37.8 | 4.4 | 14.7 | 1.0 | 100.0 | 495 |
| 30-34 | 18.6 | 4.7 | 25.1 | 35.5 | 4.6 | 10.7 | 0.9 | 100.0 | 360 |
| 35-39 | 20.5 | 3.3 | 23.6 | 32.2 | 4.2 | 16.2 | 0.0 | 100.0 | 311 |
| 40-44 | 24.4 | 4.5 | 21.8 | 31.3 | 2.7 | 15.3 | 0.0 | 100.0 | 224 |
| 45-49 | 18.1 | 5.6 | 20.4 | 35.7 | 5.8 | 14.4 | 0.0 | 100.0 | 197 |
| Marital status |  |  |  |  |  |  |  |  |  |
| Never married | 7.1 | 2.6 | 33.8 | 31.6 | 5.8 | 18.6 | 0.6 | 100.0 | 1,118 |
| Married or living together | 20.1 | 4.0 | 22.5 | 32.5 | 4.9 | 15.5 | 0.5 | 100.0 | 1,052 |
| Divorced/separated/widowed | 4.8 | 3.1 | 33.5 | 37.1 | 5.3 | 15.3 | 0.8 | 100.0 | 152 |
| Number of living children |  |  |  |  |  |  |  |  |  |
| 0 | 6.7 | 2.0 | 33.6 | 30.9 | 5.9 | 20.2 | 0.7 | 100.0 | 951 |
| 1-2 | 17.9 | 3.6 | 25.8 | 33.5 | 4.7 | 13.5 | 0.9 | 100.0 | 700 |
| 3-4 | 19.0 | 4.6 | 22.1 | 31.5 | 6.9 | 15.9 | 0.0 | 100.0 | 337 |
| 5+ | 13.4 | 4.7 | 26.9 | 34.8 | 3.6 | 16.2 | 0.3 | 100.0 | 334 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 18.4 | 4.8 | 26.1 | 31.8 | 4.3 | 14.2 | 0.4 | 100.0 | 860 |
| Rural | 9.6 | 2.3 | 30.1 | 32.6 | 6.0 | 18.6 | 0.7 | 100.0 | 1,462 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 14.7 | 4.7 | 28.1 | 34.0 | 5.3 | 12.9 | 0.3 | 100.0 | 665 |
| Manzini | 15.1 | 2.9 | 29.4 | 36.7 | 5.4 | 9.8 | 0.6 | 100.0 | 762 |
| Shiselweni | 10.0 | 2.6 | 28.4 | 26.5 | 9.3 | 22.9 | 0.4 | 100.0 | 363 |
| Lubombo | 9.1 | 2.5 | 28.4 | 28.0 | 2.7 | 28.4 | 1.0 | 100.0 | 532 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 0.5 | 0.0 | 34.2 | 28.8 | 5.3 | 30.8 | 0.4 | 100.0 | 227 |
| Lower primary | 2.2 | 0.9 | 33.5 | 22.4 | 7.5 | 33.6 | 0.0 | 100.0 | 275 |
| Higher primary | 2.9 | 0.9 | 31.1 | 37.8 | 8.0 | 18.7 | 0.6 | 100.0 | 481 |
| Secondary | 5.1 | 2.6 | 28.2 | 39.9 | 5.8 | 17.3 | 1.0 | 100.0 | 541 |
| High school | 13.0 | 7.2 | 31.0 | 35.2 | 4.2 | 8.5 | 0.9 | 100.0 | 511 |
| Tertiary | 63.5 | 6.1 | 12.1 | 16.3 | 0.3 | 1.7 | 0.0 | 100.0 | 287 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 2.2 | 0.8 | 30.6 | 30.0 | 5.9 | 28.3 | 2.2 | 100.0 | 269 |
| Second | 2.5 | 2.3 | 29.0 | 34.3 | 8.7 | 22.8 | 0.3 | 100.0 | 306 |
| Middle | 5.2 | 1.9 | 32.3 | 34.3 | 7.1 | 18.8 | 0.4 | 100.0 | 444 |
| Fourth | 6.7 | 2.9 | 25.7 | 40.6 | 5.6 | 18.1 | 0.4 | 100.0 | 580 |
| Highest | 30.8 | 5.7 | 27.8 | 24.5 | 2.5 | 8.3 | 0.4 | 100.0 | 722 |
| Total 15-49 | 12.8 | 3.2 | 28.6 | 32.3 | 5.4 | 17.0 | 0.6 | 100.0 | 2,322 |

Table 3.6 .3 shows the percent distribution of 2006-07 SDHS respondents age 50 and over according to current and recent employment. Analysis of the data is limited due to the small number of women and men age 50 years and over who were employed at the time of the survey. The most popular type of work for women age 50 years and over is in sales and services ( 54 percent), while for men it is working as a skilled manual labourer (33 percent).

## Table 3.6.3 Occupation: Older adults age $50+$

Percent distribution of women and men age 50+ employed in the 12 months preceding the survey by occupation, according to background characteristics, Swaziland 2006-07

| Background characteristic | Professional/ technical/ managerial | Clerical | Sales and services | Skilled manual | Unskilled manual | Agriculture | Missing | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WOMEN |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 50-54 | 12.4 | 7.3 | 53.1 | 13.2 | 0.0 | 14.0 | 0.0 | 100.0 | 78 |
| 55-59 | 15.9 | 8.0 | 54.1 | 11.8 | 0.0 | 10.2 | 0.0 | 100.0 | 54 |
| 60+ | 1.3 | 1.4 | 54.4 | 26.0 | 0.0 | 13.6 | 3.4 | 100.0 | 88 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | (13.9) | (19.7) | (44.4) | (15.0) | (0.0) | (7.0) | (0.0) | 100.0 | 39 |
| Rural | 7.7 | 1.9 | 55.9 | 18.7 | 0.0 | 14.2 | 1.7 | 100.0 | 181 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 14.3 | 6.0 | 50.1 | 16.7 | 0.0 | 12.9 | 0.0 | 100.0 | 63 |
| Manzini | 6.7 | 7.7 | 61.2 | 16.3 | 0.0 | 8.1 | 0.0 | 100.0 | 77 |
| Shiselweni | (3.9) | (3.4) | (52.3) | (26.3) | (0.0) | (14.1) | (0.0) | 100.0 | 47 |
| Lubombo | (10.1) | (0.0) | (46.3) | (12.7) | (0.0) | (22.0) | (8.8) | 100.0 | 34 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 0.0 | 0.0 | 50.8 | 26.3 | 0.0 | 18.5 | 4.5 | 100.0 | 67 |
| Lower primary | (1.4) | (0.0) | (72.6) | (11.0) | (0.0) | (15.0) | (0.0) | 100.0 | 41 |
| Higher primary | 3.1 | 0.8 | 61.8 | 22.1 | 0.0 | 12.3 | 0.0 | 100.0 | 58 |
| Secondary | 31.6 | 20.1 | 34.8 | 8.6 | 0.0 | 4.9 | 0.0 | 100.0 | 54 |
| High school + | * | * | * | * | * | * | * | 100.0 | 23 |
| Total 50+ | 8.8 | 5.1 | 53.9 | 18.0 | 0.0 | 12.9 | 1.4 | 100.0 | 221 |
|  |  |  |  | MEN |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 50-54 | 13.7 | 5.3 | 27.4 | 34.7 | 3.0 | 15.9 | 0.0 | 100.0 | 80 |
| 55-59 | (11.8) | (8.6) | (23.2) | (42.6) | (2.9) | (10.9) | (0.0) | 100.0 | 39 |
| 60+ | 10.0 | 0.0 | 25.5 | 27.3 | 1.8 | 33.8 | 1.5 | 100.0 | 77 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 19.2 | 4.7 | 21.9 | 43.6 | 2.2 | 8.3 | 0.0 | 100.0 | 61 |
| Rural | 8.6 | 3.5 | 27.6 | 28.8 | 2.7 | 28.0 | 0.8 | 100.0 | 136 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 10.4 | 4.4 | 25.9 | 34.8 | 4.5 | 20.0 | 0.0 | 100.0 | 61 |
| Manzini | 20.0 | 1.4 | 27.3 | 37.7 | 0.0 | 11.8 | 1.8 | 100.0 | 65 |
| Shiselweni | (3.2) | (5.0) | (26.5) | (26.3) | (7.0) | (32.1) | (0.0) | 100.0 | 31 |
| Lubombo | (7.8) | (6.4) | (23.0) | (29.7) | (0.0) | (33.1) | (0.0) | 100.0 | 40 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 3.0 | 0.0 | 35.4 | 25.9 | 4.8 | 30.9 | 0.0 | 100.0 | 51 |
| Lower primary | (3.2) | (0.0) | (28.3) | (37.1) | (3.1) | (28.3) | (0.0) | 100.0 | 37 |
| Higher primary | (11.3) | (0.0) | (23.7) | (44.9) | (0.0) | (20.1) | (0.0) | 100.0 | 37 |
| Secondary | 23.6 | 11.0 | 17.7 | 31.1 | 1.9 | 13.1 | 1.6 | 100.0 | 70 |
| High school + | (44.6) | (14.3) | (10.9) | (17.0) | (0.0) | (9.5) | (0.0) | 100.0 | 36 |
| Total 50+ | 11.9 | 3.9 | 25.8 | 33.4 | 2.5 | 21.9 | 0.6 | 100.0 | 197 |

[^4]Younger women are more likely to work in professional, technical, and managerial jobs, while older women tend to work as skilled manual labourers. Urban men are more likely than rural men to work as a professional, technician, or manager, while rural men are more likely than urban men to work in agriculture. Whereas 19 percent of urban men work in professional, technical, and managerial jobs, only 9 percent of men in rural areas have this type of occupation. On the other hand, 28 percent of rural men work in agriculture compared with only 8 percent of men in urban areas.

### 3.7 EARNINGS AND TyPE OF Employment

Table 3.7 presents the percent distribution of employed women and men age 15-49, by type of earnings and employer characteristics, according to type of employment (agricultural or non-agricultural). The majority of men and women, whether in agricultural or non-agricultural employment, receive cash income ( 91 percent of women and 88 percent of men). Men and women who work in agriculture are less likely than those who work in non-agricultural jobs to receive cash. For example, the proportion of women who earn cash in agricultural employment is 79 percent compared with 93 percent in nonagricultural work. Women working in agriculture are more likely not to be paid at all than to be paid in cash and in-kind. In fact, 10 percent of women and 25 percent of men who work in agriculture do not receive payment for their work.

| Table 3.7 Type of employment: Women and men age 15-49 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or non-agricultural), Swaziland 2006-07 |  |  |  |  |  |  |
|  | WOMEN |  |  | MEN |  |  |
| Employment characteristic | Agricultural work | Non-agricultural work | Total | Agricultural work | Non-agricultural work | Total |
| Type of earnings |  |  |  |  |  |  |
| Cash only | 78.7 | 93.0 | 91.1 | 72.6 | 91.0 | 87.7 |
| Cash and in-kind | 6.0 | 3.2 | 3.4 | 1.9 | 3.7 | 3.4 |
| In-kind only | 4.8 | 0.7 | 1.1 | 0.4 | 0.8 | 0.8 |
| Not paid | 10.4 | 3.1 | 3.7 | 24.7 | 4.4 | 7.9 |
| Missing | 0.0 | 0.1 | 0.6 | 0.3 | 0.1 | 0.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Type of employer |  |  |  |  |  |  |
| Employed by family member | 6.9 | 4.1 | 4.4 | 18.1 | 7.5 | 9.4 |
| Employed by non-family member | 55.8 | 60.1 | 59.4 | 64.0 | 74.0 | 72.0 |
| Self-employed | 37.3 | 35.4 | 35.3 | 17.6 | 18.3 | 18.2 |
| Missing | 0.0 | 0.4 | 0.9 | 0.3 | 0.2 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Continuity of employment |  |  |  |  |  |  |
| All year | 39.3 | 78.8 | 74.8 | 33.9 | 61.9 | 56.9 |
| Seasonal | 51.2 | 12.9 | 16.2 | 45.3 | 16.7 | 21.6 |
| Occasional | 9.5 | 8.1 | 8.3 | 20.3 | 21.3 | 21.1 |
| Missing | 0.0 | 0.2 | 0.7 | 0.4 | 0.2 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of respondents employed during the past 12 months | 188 | 1,978 | 2,191 | 394 | 1,914 | 2,322 |

Six in ten women and 72 percent of men are employed by a non-family member. Men are more likely than women to be employed by a family member ( 9 percent and 4 percent, respectively). The difference is more striking in agricultural work, with 18 percent of men working for a family member compared with 7 percent of women. Women are twice as likely as men to be self-employed ( 35 percent compared with 18 percent).

Women are more likely to work throughout the year than men. Three in four women hold a job all year compared with 57 percent of men. The agricultural sector is more likely to provide seasonal employment for both men ( 45 percent) and women ( 51 percent). On the other hand, work in the nonagricultural sector is more likely to provide income throughout the year ( 79 percent of women and 62 percent of men).

Figure 3.2 shows the distribution of women who have worked at any time during the 12 months preceding the survey by the type of earnings women receive (cash, in-kind, or both).

Figure 3.2 Type of Earnings of Women Employed in the Past 12 Months


Dudu Dlamini

### 4.1 INTRODUCTION

This chapter looks at a number of fertility indicators, including levels, patterns, and trends in both current and cumulative fertility; the length of birth intervals; and the age at which women initiate childbearing. Information on current and cumulative fertility is essential in monitoring population growth. The data on birth intervals are important since short intervals are strongly associated with childhood mortality. The age at which childbearing begins can also have a major impact on the health and wellbeing of both the mother and the child.

Data on fertility were collected in several ways. Each woman was asked about all of the births she had had in her lifetime. To ensure completeness of the responses, the duration, the month and year of termination, and the result of the pregnancy were recorded for each pregnancy. In addition, questions were asked separately about sons and daughters who live with the mother, those who live elsewhere, and those who have died. Subsequently, a list of all births was recorded along with name, age if still alive, and age at death if dead. Finally, information was collected on whether women were pregnant at the time of the survey.

### 4.2 Current Fertility

The level of current fertility is one of the most important topics in this report because of its direct relevance to population policies and programmes. Current fertility can be measured using the age-specific fertility rate (ASFR), the total fertility rate (TFR), the general fertility rate (GFR), and the crude birth rate (CBR). The ASFR provides the age pattern of fertility, while the TFR refers to the number of live births that a woman would have had if she were subject to the current ASFRs throughout the reproductive ages (1549 years). The GFR is expressed as the number of live births per 1,000 women of reproductive age, and the CBR is expressed as the number of live births per 1,000 population. The measures of fertility presented in this chapter refer to the period of three years prior to the survey. This generates a sufficient number of births to provide robust and current estimates.

Table 4.1 depicts measures of current fertility for the three years preceding the survey for the country as a whole and by urban and rural residence. These are the total fertility rate (TFR), general fertility rate (GFR), and crude birth rate (CBR). The survey results indicate that the TFR for Swaziland for the three years preceding the 2006-07 SDHS survey is 3.8 births per woman. As expected, fertility is considerably higher in rural areas ( 4.2 births per woman) than in urban areas ( 3.0 births per woman). As the ASFRs show, the pattern of higher rural fertility is prevalent in all age groups except age 40-49. The urban-rural difference in fertility is more pronounced

| Table 4.1 Current fertility |  |  |  |
| :---: | :---: | :---: | :---: |
| Age-specific and total fertility rate, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Swaziland 2006-07 |  |  |  |
| Age group | Resi | nce |  |
|  | Urban | Rural | Total |
| 15-19 | 89 | 118 | 111 |
| 20-24 | 163 | 219 | 202 |
| 25-29 | 124 | 184 | 165 |
| 30-34 | 113 | 182 | 159 |
| 35-39 | 83 | 105 | 99 |
| 40-44 | 31 | 30 | 30 |
| 45-49 | 0 | 5 | 4 |
| TFR | 3.0 | 4.2 | 3.8 |
| GFR | 110 | 146 | 136 |
| CBR | 31.9 | 31.0 | 31.1 |
| Note: Age-specific fertility rates are per 1,000 women. Rates for age group 45-49 may be slightly biased due to truncation. Rates are for the period 1-36 months prior to interview. |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
| TFR: Total fertility rate expressed per woman |  |  |  |
| GFR: General fertility rate expressed per 1,000 women |  |  |  |
| CBR: Crude birth rate expressed per 1,000 population |  |  |  |

for women in the age group 30-34 (113 births per 1,000 women in urban areas versus 182 births per 1,000 women in rural areas). The overall age pattern of fertility as reflected in the ASFRs indicates that childbearing begins early. Fertility is low among adolescents and increases to a peak of 202 births per 1,000 among women age 20-24 and declines thereafter.

The CBR in Swaziland is 31.1 births per 1,000 population. The overall GFR is 136 and is higher in the rural areas than in urban areas (146 and 110 births per 1,000 women, respectively).

Compared with other south-east African countries that have participated in the DHS programme, the TFR in Swaziland is the same as that in Zimbabwe and slightly higher than in Namibia and Lesotho.

Figure 4.1 Total Fertility Rates for Selected Countries in Southeast Africa


SDHS 2006-07

### 4.3 Fertility Differentials

Fertility is known to vary by residence, educational background, and other background characteristics of a woman. Table 4.2 shows several different indicators of fertility, mainly the total fertility rate, mean number of births to women age 40-49, and the percentage currently pregnant. The mean number of births to women age 40-49 is an indicator of cumulative fertility; it reflects the fertility performance of older women who are nearing the end of their reproductive period. If fertility remains stable over time, the two fertility measures, total fertility rate (TFR) and children ever born (CEB), tend to be very similar. The percentage pregnant provides a useful additional measure of current fertility, although it is recognized that it may not capture all pregnancies in an early stage.

Table 4.2 indicates that there are variations in the TFR by residence, region, education, and wealth quintile. Fertility is highest in the Shiselweni region with a TFR of 4.3 births per woman and lowest in Hhohho at 3.6 births per woman. TFR decreases gradually with increasing level of education; better educated women have fewer children than less educated women. Women with no education have on average 4.9 children compared with 2.4 children for women with tertiary education. Fertility varies
widely according to household wealth. Women in the highest wealth quintile have 2.9 children fewer than women in the lowest quintile ( 2.6 and 5.5 births per woman, respectively).

It has been noted that although the percentage currently pregnant is a useful measure of current fertility, not all women who are pregnant are likely to be captured because they may not be aware that they are pregnant or may be reluctant to disclose a pregnancy in the early stages. Six percent of women reported that they were pregnant at the time of the survey. Women who have lower primary education and those in the lowest wealth quintile are the most likely to be pregnant.

Table 4.2 also presents a crude assessment of trends in the various subgroups by comparing current fertility with a measure of completed fertility: the mean number of children ever born to women age 40-49. The mean number of children ever born to older women who are nearing the end of their reproductive period is an indicator of average completed fertility of women who began childbearing during the three decades preceding the survey. If fertility remained constant over time and the reported data on both children ever born and births during the three years preceding the survey are reasonably accurate, the TFR and the mean number of children ever born for women 40-49 are expected to be similar. When fertility levels have been falling, the TFR will be substantially lower than the mean number of children ever born among women age 40-49. The comparison suggests that fertility has fallen by 1.5 births during the past few decades, from 5.3 births per woman to 3.8. Fertility has declined in both urban and rural areas, in all regions, at all educational levels, and for all wealth quintiles. The difference between the level of current and completed fertility is highest in rural areas ( 1.6 births), the Hhohho and Lubombo regions (1.6 births), among women who have no education ( 1.6 births), and among women in the middle and fourth wealth quintiles ( 1.7 births).

| Table 4.3 Trends in age-specific fertility rates |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Swaziland 2006-07 |  |  |  |  |
| Mother's age at birth | Number of years preceding survey |  |  |  |
|  | 0-4 | 5-9 | 10-14 | 15-19 |
| 15-19 | 111 | 126 | 137 | 148 |
| 20-24 | 196 | 203 | 222 | 252 |
| 25-29 | 172 | 207 | 223 | 233 |
| 30-34 | 158 | 170 | 189 | [191] |
| 35-39 | 104 | 116 | [161] | - |
| 40-44 | 32 | [65] | - | - |
| 45-49 | [5] | - | - | - |

[^5]
### 4.4 Fertility Trends

Table 4.3 uses information from the retrospective birth histories obtained from the SDHS respondents to examine trends in age-specific fertility rates for successive five-year periods before the survey. To calculate these rates, births were classified according to the period of time in which the birth occurred and the mother's age at the time of birth. Because birth histories were not collected for women over age 50, the rates for older age groups become progressively more truncated for periods more distant from the survey date. For example, rates cannot be calculated for women age 45-49 for the period 5-9 years or more prior to the survey, because women in that age group would have been 50 years or older at the time of the survey.

Nonetheless, the results in Table 4.3 show that fertility has dropped substantially among all age groups over the past two decades. This decline is most obvious in the 15 years preceding the survey, with the largest decline observed between the two most recent five-year periods. Fertility decline is steepest among the cohort age $30-34$, with a 60 percent decline between the period 15-19 years before the survey and the period $0-4$ years before the survey.

Another way to examine fertility trends is to compare current estimates with earlier surveys. Table 4.4 and Figure 4.2 show the ASFRs for the 1986 and 1997 Population and Housing Censuses (PHC), 1991 Demographic and Housing Survey (DHS), and 2006-07 SDHS. Estimates prior to the SDHS were calculated using information on total number of children ever born and surviving. The data indicate that fertility has been declining rapidly in Swaziland, with the TFR falling from 6.4 in the 1986 PHC to 4.5 in 1997 PHC, and to

Table 4.4 Trends in fertility
Age-specific fertility rates (per 1,000 women) and total fertility rates for the three years preceding the survey, Swaziland 1986, 1991, 1997, and 2006-07

| Age group | PHC | DHS | PHC | SDHS |
| :--- | ---: | ---: | ---: | :---: |
| $15-19$ | 145 | 134 | 90 | 111 |
| $20-24$ | 289 | 253 | 211 | 202 |
| $25-29$ | 279 | 252 | 210 | 165 |
| $30-34$ | 246 | 208 | 169 | 159 |
| $35-39$ | 178 | 147 | 133 | 99 |
| $40-44$ | 89 | 88 | 64 | 30 |
| $45-49$ | 45 | 35 | 31 | 4 |
| TFR | 6.4 | 5.6 | 4.5 | 3.8 |

DHS = Demographic and Housing Survey
PHC = Population and Housing Census
Sources: CSO, 1976 Population and Housing Census, Vol. 1; CSO, 1986 Population and Housing Census, Vol. 4; CSO, 1997 Population and Housing Census Vol. 4. 3.8 in the 2006-07 SDHS. This translates to a decrease of 2.6 births since 1986.

A substantial fertility decline has occurred in all age groups. Between 1986 and 1997, the largest decline took place among the younger age groups, but since 1997, larger declines in ASFR are observed among older women (Figure 4.2).

Figure 4.2 Trends in Fertility


### 4.5 Children Ever Born and Living

Table 4.5 presents the distribution of all women and currently married women by number of children ever born, according to five-year age groups. The table also shows the mean number of children ever born. Data on the number of children ever born reflect the accumulation of births to women over their entire reproductive years and therefore have limited reference to current fertility levels, particularly when a country has experienced a decline in fertility. Moreover, the data are subject to recall error, which is typically greater for older than younger women. Nevertheless, the information on children ever born (or parity) is useful in looking at a number of issues. The parity data show how average family size varies across age groups. The percentage of women in their forties who have never had children also provides an indicator of the level of primary infertility, or the inability to bear children. Comparison of the differences in the mean number of children ever born and surviving reflects the cumulative effects of mortality levels during the period in which women have been bearing children.

Table 4.5 shows the percent distribution of all women and currently married women by number of children ever born, mean number of children ever born, and mean number of children living. More than four-fifths of women age 15-19 (82 percent) have never given birth. However, this proportion declines to 11 percent for women age 25-29 and to 5 percent or less among women age 30 and above, indicating that childbearing among Swazi women is nearly universal. On average, Swazi women nearing the end of their reproductive years have attained a parity of 4.8 children. This is one child more than the total fertility rate, a difference brought about by the decline in fertility during the 1980s and 1990s.

The same pattern is replicated for currently married women, except that the mean number of children ever born is higher for currently married women ( 3.6 children) than for all women ( 2.3 children). The difference in the mean number of children ever born between all women and currently married women is due to a substantial proportion of young and unmarried women in the former category who exhibit lower fertility.

| Table 4.5 Children ever born and living |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Number of children ever born |  |  |  |  |  |  |  |  |  |  | Total | Number <br> of women | Meannumber ofchildrenever born | Meannumber oflivingchildren |
| Age | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ |  |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 81.5 | 16.0 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,274 | 0.21 | 0.19 |
| 20-24 | 29.2 | 41.0 | 23.6 | 4.9 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,046 | 1.08 | 0.97 |
| 25-29 | 10.8 | 23.7 | 28.8 | 21.5 | 9.1 | 4.9 | 0.9 | 0.3 | 0.0 | 0.0 | 0.0 | 100.0 | 729 | 2.14 | 1.90 |
| 30-34 | 3.7 | 11.1 | 23.8 | 26.6 | 13.0 | 10.7 | 7.2 | 2.0 | 1.5 | 0.1 | 0.2 | 100.0 | 616 | 3.17 | 2.92 |
| 35-39 | 4.8 | 7.3 | 11.9 | 16.2 | 18.0 | 14.0 | 12.4 | 7.5 | 4.6 | 1.9 | 1.4 | 100.0 | 503 | 4.17 | 3.86 |
| 40-44 | 3.3 | 5.1 | 8.9 | 11.0 | 14.1 | 12.9 | 13.4 | 10.5 | 10.2 | 4.1 | 6.4 | 100.0 | 438 | 5.19 | 4.65 |
| 45-49 | 4.6 | 6.9 | 5.7 | 8.3 | 13.2 | 11.5 | 12.5 | 11.4 | 7.9 | 9.2 | 8.7 | 100.0 | 383 | 5.50 | 4.76 |
| Total | 30.1 | 19.3 | 15.2 | 10.7 | 7.3 | 5.5 | 4.4 | 2.8 | 2.2 | 1.3 | 1.4 | 100.0 | 4,987 | 2.28 | 2.05 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 26.2 | 58.5 | 15.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 88 | 0.89 | 0.83 |
| 20-24 | 13.6 | 39.4 | 35.5 | 8.6 | 2.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 343 | 1.48 | 1.31 |
| 25-29 | 6.0 | 17.4 | 30.2 | 24.5 | 13.1 | 7.0 | 1.3 | 0.5 | 0.0 | 0.0 | 0.0 | 100.0 | 388 | 2.50 | 2.24 |
| 30-34 | 1.5 | 7.4 | 23.3 | 26.0 | 14.3 | 12.3 | 10.0 | 2.9 | 2.1 | 0.1 | 0.0 | 100.0 | 379 | 3.49 | 3.23 |
| 35-39 | 2.9 | 4.9 | 9.7 | 16.0 | 18.0 | 14.6 | 13.9 | 8.7 | 6.9 | 2.7 | 1.7 | 100.0 | 334 | 4.59 | 4.25 |
| 40-44 | 2.1 | 3.8 | 8.5 | 9.5 | 14.3 | 14.6 | 12.9 | 10.5 | 12.0 | 5.4 | 6.5 | 100.0 | 291 | 5.44 | 4.93 |
| 45-49 | 4.3 | 4.6 | 6.0 | 7.4 | 13.5 | 12.7 | 11.5 | 8.9 | 10.7 | 9.9 | 10.5 | 100.0 | 238 | 5.79 | 5.12 |
| Total | 6.1 | 15.6 | 20.0 | 15.6 | 12.1 | 9.5 | 7.5 | 4.5 | 4.4 | 2.3 | 2.4 | 100.0 | 2,062 | 3.58 | 3.25 |

### 4.6 BIRTH INTERVALS

A birth interval is defined as the length of time between two successive live births. The study of birth intervals is important in understanding the health status of young children. Information on birth intervals provides insight into birth spacing patterns, which affect fertility as well as maternal, infant, and childhood mortality. Research has shown that short birth intervals are closely associated with poor health of children, especially during infancy. Children born too close to a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and dying at an early age. Longer birth intervals, on the other hand, contribute to the improved health status of both mother and child.

Table 4.6 presents the distribution of second and higher-order births in the five years preceding the survey by the number of months since the previous birth, according to background characteristics. Data in Table 4.6 show that about 5 percent of births are less than 18 months apart and 16 percent have an interval of less than two years. Three in ten births are born 24-35 months after the previous birth, and 31 percent are at least three years apart.

Table 4.6 also presents the median number of months since the preceding birth. The median birth interval in Swaziland is 37.9 months. The median number of months since a preceding birth increases significantly with age, from 26.7 months among mothers age 15-19 to 42.1 months among mothers age 40-49. There are no marked differences in the length of the median birth interval by sex of the preceding birth, urban-rural residence, and region.

Studies have shown that the death of a preceding child leads to a shorter birth interval than when the preceding child survived. Data from the 2006-07 SDHS show that the median birth interval for births whose previous sibling is alive is about 10 months longer than for births whose previous sibling is dead ( 38.9 months and 29.1 months, respectively).

In general, the median birth interval increases with the mother's education and wealth status.

| Table 4.6 Birth intervals |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Months since preceding birth |  |  |  |  |  |  | Total | Number of nonfirst births | Median number of months since preceding birth |
|  | 7-17 | 18-23 | 24-35 | 36-47 | 48-54 | 55-59 | 60+ |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 15.2 | 16.3 | 58.5 | 10.0 | 0.0 | 0.0 | 0.0 | 100.0 | 28 | 26.7 |
| 20-29 | 6.0 | 13.7 | 32.4 | 21.2 | 8.3 | 3.4 | 15.0 | 100.0 | 921 | 35.1 |
| 30-39 | 3.5 | 7.9 | 27.4 | 19.4 | 8.3 | 3.2 | 30.3 | 100.0 | 805 | 42.3 |
| 40-49 | 3.4 | 7.2 | 27.0 | 17.6 | 6.3 | 5.1 | 33.4 | 100.0 | 177 | 42.1 |
| Birth order |  |  |  |  |  |  |  |  |  |  |
| 2-3 | 4.7 | 10.4 | 29.0 | 20.3 | 8.1 | 3.5 | 24.1 | 100.0 | 1,065 | 39.0 |
| 4-6 | 5.7 | 10.3 | 28.2 | 19.7 | 7.9 | 3.8 | 24.3 | 100.0 | 625 | 38.2 |
| 7+ | 3.4 | 13.5 | 40.7 | 19.2 | 7.7 | 2.1 | 13.4 | 100.0 | 241 | 33.5 |
| Sex of preceding birth |  |  |  |  |  |  |  |  |  |  |
| Male | 4.0 | 11.6 | 31.9 | 19.7 | 7.9 | 2.7 | 22.2 | 100.0 | 952 | 36.7 |
| Female | 5.8 | 9.9 | 28.5 | 20.2 | 8.1 | 4.1 | 23.5 | 100.0 | 979 | 39.1 |
| Survival of preceding birth |  |  |  |  |  |  |  |  |  |  |
| Living | 3.5 | 10.2 | 30.0 | 20.5 | 8.2 | 3.6 | 24.0 | 100.0 | 1,725 | 38.9 |
| Dead | 16.3 | 15.5 | 31.8 | 15.2 | 6.5 | 1.9 | 12.7 | 100.0 | 206 | 29.1 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 5.4 | 9.1 | 26.3 | 20.0 | 9.1 | 2.6 | 27.5 | 100.0 | 411 | 40.4 |
| Rural | 4.7 | 11.2 | 31.3 | 20.0 | 7.7 | 3.6 | 21.6 | 100.0 | 1,520 | 37.1 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 4.2 | 13.7 | 31.2 | 19.9 | 6.8 | 2.4 | 21.9 | 100.0 | 527 | 36.5 |
| Manzini | 5.2 | 8.5 | 29.6 | 20.0 | 10.3 | 3.2 | 23.1 | 100.0 | 577 | 38.6 |
| Shiselweni | 6.1 | 10.8 | 31.3 | 16.5 | 6.2 | 4.0 | 25.2 | 100.0 | 426 | 37.6 |
| Lubombo | 4.0 | 10.1 | 28.6 | 23.6 | 8.2 | 4.4 | 21.1 | 100.0 | 402 | 39.0 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 7.8 | 11.0 | 32.1 | 22.6 | 8.3 | 6.0 | 12.2 | 100.0 | 217 | 35.7 |
| Lower primary | 4.0 | 12.8 | 28.6 | 19.9 | 7.2 | 3.1 | 24.3 | 100.0 | 194 | 38.1 |
| Higher primary | 4.9 | 11.3 | 34.0 | 20.3 | 6.0 | 3.1 | 20.4 | 100.0 | 525 | 35.9 |
| Secondary | 3.6 | 10.7 | 31.2 | 21.0 | 8.3 | 3.8 | 21.5 | 100.0 | 618 | 37.4 |
| High school | 5.4 | 9.1 | 24.1 | 13.1 | 12.2 | 2.4 | 33.8 | 100.0 | 270 | 46.8 |
| Tertiary | 6.4 | 8.2 | 20.4 | 24.7 | 5.9 | 0.9 | 33.4 | 100.0 | 108 | 43.8 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 5.5 | 13.3 | 30.6 | 21.6 | 7.6 | 4.1 | 17.4 | 100.0 | 420 | 36.2 |
| Second | 4.1 | 9.7 | 35.4 | 19.5 | 9.2 | 2.9 | 19.1 | 100.0 | 439 | 36.3 |
| Middle | 5.5 | 8.5 | 32.3 | 19.6 | 6.0 | 3.3 | 24.9 | 100.0 | 381 | 37.8 |
| Fourth | 4.1 | 13.0 | 26.9 | 16.8 | 9.0 | 4.3 | 25.9 | 100.0 | 360 | 39.8 |
| Highest | 5.3 | 9.0 | 23.8 | 22.4 | 8.0 | 2.4 | 29.0 | 100.0 | 331 | 42.1 |
| Total | 4.9 | 10.7 | 30.2 | 20.0 | 8.0 | 3.4 | 22.8 | 100.0 | 1,931 | 37.9 |

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth.

### 4.7 Age at First Birth

The age at which childbearing commences is an important determinant of the overall level of fertility as well as the health and welfare of the mother and the child. In some societies, postponement of first births due to an increase in age at marriage has contributed to overall fertility decline. Table 4.7 shows that women are gradually having children at an older age. The median age at first birth has increased from 18.9 years for women age 45-49 to 19.8 years for women age 20-24.

Overall, 6 percent of women age 25-49 have given birth by age 15 and 59 percent of women have become mothers by age 20. The increase in age at marriage can also be detected from the increase over time in the proportion of women who have given birth at age 15 . Whereas 1 percent of women age 15-19 gave birth by age 15 , the corresponding proportion for women age 45-49 is 12 percent.

| Table 4.7 Age at first birth |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-49 who gave birth by specific exact ages, percentage who have never given birth, and median age at first birth, according to current age, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  |  | tage | gave | y ex |  | Percentage who have never | Number | Median age at first |
| Current age | 15 | 18 | 20 | 22 | 25 | given birth | of women | birth |
| 15-19 | 1.4 | na | na | na | na | 81.5 | 1,274 | , |
| 20-24 | 2.3 | 28.0 | 52.0 | na | na | 29.2 | 1,046 | 19.8 |
| 25-29 | 4.3 | 29.5 | 55.6 | 71.1 | 84.6 | 10.8 | 729 | 19.5 |
| 30-34 | 4.7 | 31.0 | 57.2 | 73.2 | 87.1 | 3.7 | 616 | 19.4 |
| 35-39 | 4.5 | 32.3 | 56.3 | 75.5 | 86.5 | 4.8 | 503 | 19.4 |
| 40-44 | 7.4 | 40.8 | 65.6 | 79.2 | 89.4 | 3.3 | 438 | 18.7 |
| 45-49 | 12.0 | 40.1 | 62.1 | 79.1 | 88.5 | 4.6 | 383 | 18.9 |
| 20-49 | 5.0 | 32.1 | 56.8 | na | na | 12.5 | 3,713 | 19.4 |
| 25-49 | 6.0 | 33.7 | 58.7 | 74.9 | 86.9 | 5.9 | 2,667 | 19.2 |
| na $=$ Not applicable <br> $\mathrm{a}=$ Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group |  |  |  |  |  |  |  |  |

Table 4.8 presents trends in the median age at first birth across age cohorts for sub-groups of women. The measures are presented for women age 25-49 to ensure that half of the women have already had a birth. The median age at first birth does not vary significantly by urban-rural residence. For example, the median in rural areas is 18.9 years and in urban areas it is 20.1 years. This is true for all age groups. Regional variations are also small; the median age at first birth in Hhohho, Manzini and Shiselweni is 19.3 years or higher, while in Lubombo the median is 18.6 years.

The median age at first birth increases with the woman's level of education and wealth status. The median for women with tertiary education is 4.3 years higher than for women with no education ( 23.1 years and 17.8 years, respectively). The median age for women in the highest quintile is 2.2 years higher than for women in the lowest quintile (20.7 years and 18.5 years, respectively).

| Table 4.8 Median age at first birth |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median age at first birth among women age 25-49 years, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| Background characteristic | Current age |  |  |  |  | $\begin{gathered} \text { Women } \\ \text { age 25-49 } \end{gathered}$ |
|  | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |
| Residence |  |  |  |  |  |  |
| Urban | 20.4 | 20.3 | 20.2 | 20.0 | 19.3 | 20.1 |
| Rural | 19.1 | 19.2 | 19.1 | 18.3 | 18.8 | 18.9 |
| Region |  |  |  |  |  |  |
| Hhohho | 19.8 | 19.6 | 19.9 | 18.8 | 18.6 | 19.5 |
| Manzini | 19.7 | 19.8 | 19.8 | 18.8 | 18.7 | 19.4 |
| Shiselweni | 19.4 | 19.3 | 19.4 | 18.9 | 19.9 | 19.3 |
| Lubombo | 18.8 | 18.8 | 18.5 | 18.0 | 18.7 | 18.6 |
| Education |  |  |  |  |  |  |
| No education | 18.0 | 17.7 | 18.2 | 16.8 | 18.7 | 17.8 |
| Lower primary | 17.2 | 18.6 | 18.8 | 17.7 | 17.2 | 18.0 |
| Higher primary | 18.4 | 18.3 | 18.2 | 18.5 | 18.0 | 18.3 |
| Secondary | 18.7 | 19.3 | 19.3 | 19.0 | 19.4 | 19.1 |
| High school | 21.1 | 20.4 | 21.3 | 20.0 | 21.6 | 20.8 |
| Tertiary | 24.3 | 24.0 | 22.9 | 23.0 | 21.6 | 23.1 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 18.5 | 18.6 | 18.8 | 17.5 | 18.8 | 18.5 |
| Second | 18.7 | 18.7 | 18.7 | 18.3 | 18.7 | 18.6 |
| Middle | 18.9 | 19.3 | 18.8 | 18.2 | 18.6 | 18.8 |
| Fourth | 20.2 | 19.2 | 19.9 | 19.2 | 18.1 | 19.5 |
| Highest | 21.2 | 21.2 | 20.4 | 20.1 | 19.9 | 20.7 |
| Total | 19.5 | 19.4 | 19.4 | 18.7 | 18.9 | 19.2 |

### 4.8 Teenage Pregnancy and Motherhood

Teenage pregnancy is a major health concern because of its association with higher morbidity and mortality for both the mother and child. Childbearing during the teenage years also frequently has adverse social consequences, particularly on female educational attainment since women who become mothers in their teens are more likely to curtail education.

Table 4.9 shows the percentage of women age $15-19$ who have given birth or who are pregnant with their first child. A total of 23 percent of teenagers have started childbearing; 19 percent have had a live birth and 4 percent are pregnant with their first child. While only 4 percent of women age 15 have started childbearing, 45 percent of women are either mothers or are pregnant with their first child by age 19. Rural women are more likely than urban teenagers to have started childbearing. However, the proportion of teenagers who are pregnant with their first child is slightly higher in urban areas than in rural areas ( 6 percent compared with 4 percent).

There are notable regional differences in the proportion of teenagers who have begun childbearing, ranging from 18 percent in Manzini to 27 percent in Lubombo. There is an inverse relationship between early childbearing and education. Teenagers with less education are more likely to start childbearing early than better educated women; 61 percent of teenagers who had no education had begun childbearing compared to 15 percent of those with high school education. It appears that even minimal education makes a difference in delaying pregnancy among teenagers; the proportion of teenagers who have begun childbearing is 36 percent for those with lower primary education and 29 percent for those with higher primary education. These proportions are significantly lower than for those with no education (61 percent). Teenagers in the lowest wealth quintile are more than twice as likely to start childbearing early than those in the highest wealth quintile ( 33 percent and 15 percent, respectively).

| Table 4.9 Teenage pregnancy and motherhood |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child and percentage who have begun childbearing, by background characteristics, Swaziland 2006-07 |  |  |  |  |
|  | Percen | tage who: | Percentage |  |
| Background characteristic | Have had a live birth | Are pregnant with first child | who have begun childbearing | Number of women |
| Age |  |  |  |  |
| 15 | 2.5 | 1.7 | 4.2 | 248 |
| 16 | 6.8 | 4.2 | 11.0 | 273 |
| 17 | 16.4 | 6.0 | 22.4 | 268 |
| 18 | 29.3 | 3.3 | 32.6 | 241 |
| 19 | 39.4 | 5.0 | 44.5 | 245 |
| Residence |  |  |  |  |
| Urban | 13.9 | 5.6 | 19.5 | 249 |
| Rural | 19.6 | 3.7 | 23.3 | 1,025 |
| Region |  |  |  |  |
| Hhohho | 20.6 | 5.5 | 26.1 | 303 |
| Manzini | 14.9 | 3.4 | 18.3 | 415 |
| Shiselweni | 16.8 | 4.2 | 21.0 | 301 |
| Lubombo | 24.0 | 3.2 | 27.2 | 254 |
| Education |  |  |  |  |
| No education | (53.9) | (7.4) | (61.3) | 27 |
| Lower primary | 31.0 | 4.5 | 35.5 | 82 |
| Higher primary | 23.9 | 4.9 | 28.8 | 425 |
| Secondary | 13.6 | 3.0 | 16.6 | 576 |
| High school | 10.0 | 5.1 | 15.1 | 157 |
| Tertiary | * | * | * | 6 |
| Wealth quintile |  |  |  |  |
| Lowest | 26.6 | 5.9 | 32.5 | 212 |
| Second | 19.6 | 4.5 | 24.1 | 227 |
| Middle | 19.4 | 4.4 | 23.8 | 263 |
| Fourth | 16.7 | 3.6 | 20.3 | 309 |
| Highest | 12.3 | 2.3 | 14.6 | 262 |
| Total | 18.5 | 4.1 | 22.6 | 1,274 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

## Marjorie Mavuso

This chapter presents the results of the 2006-07 Swaziland Demographic and Health Survey (SDHS) regarding the following: knowledge of specific contraceptive methods, brands of some methods, sources of methods and cost of methods, behaviour regarding contraceptive use, and attitudes towards use of contraception. The results are presented to show the perspectives of males and females in the reproductive age range, by age group. Because this is the first DHS survey in Swaziland and no comparable survey has ever been conducted in Swaziland, it is not possible to compare survey data. The findings are particularly important to Swaziland because they will contribute towards the evaluation of the national efforts in making family planning services available to the entire population of reproductive age. It will also contribute to better policy decisions regarding the unmet need for family planning, which will create further demand for quality family planning services.

### 5.1 Knowledge of Contraceptive Methods

Information about contraception is a major determinant of positive attitudes towards family planning, method acquisition, and sustained contraceptive use. Couples who have adequate knowledge about the benefits of family planning are more likely to have a small family size and hence have better health outcomes compared with those who have less knowledge. In Swaziland, where patriarchy is the dominant form of social organisation, it is very important to ensure that men have adequate knowledge of family planning, because they influence reproductive health outcomes.

In the SDHS, male and female respondents age 15-49 years who were married or sexually active were asked a series of questions about contraceptive knowledge and use. They were first asked to name all of the family planning methods that they knew. For those methods they could not name, the interviewer described the method and further asked if the respondent had ever heard of the method. If the respondent remembered the method then it was added to the list of methods known by the respondent. The range of methods included two categories: traditional and modern methods. Modern methods included female and male sterilisation, the pill, IUD, injectables, implants, male and female condoms, diaphragm, foam/jelly, lactational amenorrhoea (LAM), and emergency contraception. Traditional methods included withdrawal, rhythm/Billings/mucus, and folk method.

Table 5.1 presents the percentage distribution of all married and sexually active women and men who knew any contraceptive method by each specific method. The data are presented by sex, for currently married and for sexually active unmarried respondents. Table 5.2 presents the contraceptive knowledge levels of all the respondents by selected demographic characteristics. There are 12 modern and three traditional methods of contraception listed. The data show that knowledge of at least one contraceptive method among women and men is universal in Swaziland, regardless of marital status. Of the 12 modern methods of contraception listed in the questionnaire, the most widely known method is male condom (99 percent for both males and females). The best known methods for female respondents are male condom ( 99 percent), injectables ( 96 percent), the pill ( 95 percent), and female condom ( 91 percent). For men, the best-known methods are male condom ( 99 percent), followed by female condom, the pill, and injectables (84 percent each).

| Table 5.1 Knowledge of contraceptive methods |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all respondents, currently married respondents and sexually active unmarried respondents age 15-49 who know any contraceptive method, by specific method, Swaziland 2006-07 |  |  |  |  |  |  |
|  | Women |  |  | Men |  |  |
| Method | All women | Currently married women | Sexually active unmarried woman | All men | Currently married men | ```Sexually active unmarried men``` |
| Any method | 99.7 | 99.9 | 99.7 | 99.6 | 100.0 | 100.0 |
| Any modern method | 99.7 | 99.9 | 99.7 | 99.5 | 99.9 | 100.0 |
| Female sterilisation | 68.6 | 77.0 | 71.3 | 63.3 | 76.3 | 68.5 |
| Male sterilisation | 27.9 | 33.6 | 33.1 | 35.0 | 46.9 | 38.4 |
| Pill | 94.7 | 98.4 | 97.7 | 84.1 | 93.8 | 88.3 |
| IUD | 74.5 | 88.1 | 83.7 | 49.6 | 74.3 | 57.5 |
| Injectables | 95.9 | 98.5 | 99.2 | 83.7 | 96.1 | 91.4 |
| Implants | 3.7 | 4.6 | 3.3 | 4.2 | 7.1 | 4.3 |
| Male condom | 98.8 | 98.7 | 99.3 | 99.2 | 99.6 | 100.0 |
| Female condom | 91.3 | 92.7 | 93.6 | 84.1 | 88.3 | 90.5 |
| Diaphragm | 19.4 | 22.9 | 24.3 | 19.6 | 23.9 | 22.1 |
| Foam/jelly | 18.6 | 22.8 | 21.7 | 16.8 | 23.1 | 21.0 |
| Lactational amenorrhoea (LAM) | 58.3 | 73.2 | 64.1 | 33.0 | 54.2 | 33.4 |
| Emergency contraception | 25.7 | 24.8 | 37.6 | 21.8 | 27.0 | 31.2 |
| Any traditional method | 77.5 | 87.0 | 85.9 | 78.5 | 94.1 | 92.2 |
| Rhythm/Billings/mucus method | 38.3 | 39.9 | 44.4 | 46.0 | 57.8 | 60.3 |
| Withdrawal | 70.3 | 82.7 | 81.2 | 73.5 | 92.1 | 87.9 |
| Folk method | 9.9 | 13.7 | 9.3 | 4.3 | 5.8 | 3.7 |
| Mean number of methods known | 8.0 | 8.7 | 8.6 | 7.2 | 8.7 | 8.0 |
| Number of respondents | 4,987 | 2,062 | 573 | 4,156 | 1,219 | 587 |
| ${ }^{1}$ Had last sexual intercourse within 30 days preceding the survey |  |  |  |  |  |  |

Table 5.1 also shows that the least known methods ( 25 percent or less for all groups) include diaphragm, foam/jelly, and implants. Of note is that emergency contraception is more likely to be known by sexually active unmarried men and women ( 31 percent and 38 percent, respectively) than by married respondents.

Knowledge of traditional methods is relatively high (78 percent of all women and 79 percent of all men). Currently married respondents are only slightly more aware of traditional family planning methods than unmarried respondents. For example, knowledge of at least one traditional contraceptive method among married men is 94 percent compared with 92 percent of unmarried sexually active men. Knowledge of the withdrawal method is high among women and men ( 70 percent or higher). It is interesting to note that men are more likely to have heard of the rhythm/Billings/mucus method than women; 60 percent and 44 percent, respectively. Folk methods were mentioned by 10 percent or less of respondents, except among currently married women (14 percent).

Knowledge of contraceptives is also universal across all subgroups of population (see Table 5.2).

| Percentage of currently married women and currently married men age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women |  |  | Men |  |  |
| Background characteristic | Heard of any method | Heard of any modern method $^{1}$ | Number | Heard of any method | Heard of any modern method $^{1}$ | Number |
| Age |  |  |  |  |  |  |
| 15-19 | 99.1 | 99.1 | 88 | * | * | 2 |
| 20-24 | 100.0 | 100.0 | 343 | 100.0 | 100.0 | 66 |
| 25-29 | 99.9 | 99.9 | 388 | 100.0 | 100.0 | 224 |
| 30-34 | 100.0 | 100.0 | 379 | 100.0 | 100.0 | 255 |
| 35-39 | 100.0 | 100.0 | 334 | 100.0 | 100.0 | 253 |
| 40-44 | 100.0 | 100.0 | 291 | 100.0 | 100.0 | 211 |
| 45-49 | 100.0 | 99.5 | 238 | 100.0 | 99.6 | 208 |
| Residence |  |  |  |  |  |  |
| Urban | 99.9 | 99.9 | 542 | 100.0 | 100.0 | 490 |
| Rural | 99.9 | 99.9 | 1,520 | 100.0 | 99.9 | 729 |
| Region |  |  |  |  |  |  |
| Hhohho | 99.9 | 99.9 | 600 | 100.0 | 99.8 | 389 |
| Manzini | 99.9 | 99.8 | 650 | 100.0 | 100.0 | 368 |
| Shiselweni | 100.0 | 100.0 | 363 | 100.0 | 100.0 | 175 |
| Lubombo | 100.0 | 100.0 | 449 | 100.0 | 100.0 | 287 |
| Education |  |  |  |  |  |  |
| No education | 100.0 | 100.0 | 247 | 100.0 | 99.5 | 156 |
| Lower primary | 99.5 | 98.9 | 176 | 100.0 | 100.0 | 131 |
| Higher primary | 100.0 | 100.0 | 538 | 100.0 | 100.0 | 227 |
| Secondary | 100.0 | 100.0 | 600 | 100.0 | 100.0 | 257 |
| High school | 100.0 | 100.0 | 304 | 100.0 | 100.0 | 241 |
| Tertiary | 99.8 | 99.8 | 197 | 100.0 | 100.0 | 206 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 99.8 | 99.5 | 353 | 100.0 | 99.5 | 158 |
| Second | 100.0 | 100.0 | 369 | 100.0 | 100.0 | 163 |
| Middle | 100.0 | 100.0 | 379 | 100.0 | 100.0 | 189 |
| Fourth | 100.0 | 100.0 | 424 | 100.0 | 100.0 | 268 |
| Highest | 99.9 | 99.9 | 537 | 100.0 | 100.0 | 440 |
| Total 15-49 | 99.9 | 99.9 | 2,062 | 100.0 | 99.9 | 1,219 |
| Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. <br> ${ }^{1}$ Female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, lactational amenorrhea method (LAM), emergency contraception, and other modern methods |  |  |  |  |  |  |

### 5.2 Ever Use of Contraception

All respondents who said they knew a method of contraception (traditional or modern), were asked if they had ever used the method listed. The data are presented in Tables 5.3.1 and 5.3.2. Table 5.3.1 shows that 71 percent of women have used any method and almost all of them ( 70 percent) used a modern method. Sexually active unmarried women are more likely to have used a family planning method than their married counterparts ( 92 percent and 89 percent, respectively). The method used most often is male condom ( 45 percent), followed by injectables (43 percent), and the pill (31 percent). Other methods that were regularly ever used by women are LAM (17 percent) and traditional methods (18 percent). The male condom was the most popular method ever used by sexually active unmarried women ( 73 percent), while injectables are most popular among currently married women (61 percent) (Figure 5.1).


Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.
LAM = Lactational amenorrhea method
${ }^{1}$ Women who had sexual intercourse within 30 days preceding the survey

Ever use of contraception varies by age. Ever use of a modern contraceptive method is 28 percent for women age $15-19$, rises sharply to reach a peak of 94 percent among women age $30-34$, and then drops to 80 percent at age 45-49. The use of selected methods (e.g., female sterilisation, male sterilisation, and IUD) increases with age. Injectables are popular among women age 25-39 and male condoms are favoured by women age $25-34$, especially those who are sexually active and unmarried.

Figure 5.1 Ever Use of Contraception among Women


Table 5.3.2 shows that 59 percent of men had ever used a method of contraception and 55 percent had used a modern method. As in the case of women, the level of ever use is higher among sexually active unmarried men than for currently married men. The most popular ever used method is the male condom. In both groups younger men reported less use of contraception. Ever use of contraception also varies by the man's age. Current use of any contraceptive method is 17 percent for men age $15-19$, rises sharply to reach a peak of 88 percent among men age 30-34, and then declines to 78 percent at age 45-49. Male condoms are favoured by men age $25-34$, especially those who are sexually active and unmarried. The use of traditional methods increases with age.

Table 5.3.2 Ever use of contraception: Men
Percentage of all men, currently married men, and sexually active unmarried men age 15-49 who have ever used any contraceptive method by method, according to age, Swaziland 2006-07

| Age | Any method | Any modern method | Modern method |  | Any traditional method | Traditional method |  | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Rhythm/ |  |  |
|  |  |  | Male sterilization | Male condom |  | Billings/ mucus method | Withdrawal |  |
| ALL MEN |  |  |  |  |  |  |  |  |
| 15-19 | 16.6 | 15.5 | 0.4 | 15.1 |  | 3.3 | 1.8 | 1.9 | 1,323 |
| 20-24 | 67.1 | 64.6 | 1.0 | 64.0 | 21.3 | 12.1 | 11.9 | 886 |
| 25-29 | 85.3 | 81.3 | 0.6 | 81.0 | 36.3 | 19.4 | 25.5 | 624 |
| 30-34 | 87.5 | 82.5 | 0.0 | 82.5 | 49.4 | 24.1 | 39.3 | 431 |
| 35-39 | 83.4 | 75.5 | 1.1 | 74.7 | 51.5 | 22.7 | 43.4 | 367 |
| 40-44 | 88.0 | 80.6 | 0.3 | 80.6 | 51.8 | 22.6 | 42.1 | 269 |
| 45-49 | 78.1 | 66.6 | 2.4 | 65.1 | 53.4 | 21.7 | 44.0 | 256 |
| Total 15-49 | 59.3 | 55.4 | 0.7 | 55.0 | 27.4 | 13.4 | 20.3 | 4,156 |
| CURRENTLY MARRIED MEN |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | * | 2 |
| 20-24 | 81.3 | 72.3 | 1.4 | 72.3 | 39.2 | 23.6 | 26.0 | 66 |
| 25-29 | 91.2 | 83.4 | 1.0 | 82.9 | 47.1 | 27.0 | 31.1 | 224 |
| 30-34 | 89.6 | 81.3 | 0.0 | 81.3 | 55.8 | 27.2 | 46.8 | 255 |
| 35-39 | 85.4 | 76.6 | 1.6 | 75.4 | 56.8 | 24.9 | 47.9 | 253 |
| 40-44 | 88.9 | 82.7 | 0.4 | 82.7 | 52.9 | 23.5 | 44.0 | 211 |
| 45-49 | 80.3 | 68.5 | 2.4 | 66.6 | 55.9 | 22.3 | 45.2 | 208 |
| Total 15-49 | 86.9 | 78.3 | 1.1 | 77.6 | 53.0 | 25.0 | 42.2 | 1,219 |


|  | SEXUALLY ACTIVE UNMARRIED MEN ${ }^{1}$ |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | ---: |
| $15-19$ | 80.9 | 72.2 | 2.0 | 70.3 | 26.3 | 18.0 | 11.1 | 55 |
| $20-24$ | 92.2 | 91.0 | 0.0 | 91.0 | 37.3 | 22.7 | 19.7 | 202 |
| $25-29$ | 95.9 | 94.7 | 0.5 | 94.7 | 40.4 | 16.5 | 33.0 | 175 |
| $30-34$ | 97.6 | 96.6 | 0.0 | 96.6 | 55.8 | 32.4 | 36.0 | 83 |
| $35-39$ | $(94.1)$ | $(94.1)$ | $(0.0)$ | $(94.1)$ | $(40.1)$ | $(11.2)$ | $(35.8)$ | 43 |
| $40-44$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | 18 |
| $45-49$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | $*$ | 11 |
| Total 15-49 | 93.0 | 90.8 | 0.5 | 90.6 | 40.4 | 21.3 | 26.8 | 587 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.
${ }^{1}$ Men who had sexual intercourse within 30 days preceding the survey

### 5.3 Current Use of Contraceptive Methods

To measure the national contraceptive prevalence rate (CPR), women age $15-49$ were asked to indicate whether they were currently using any method of contraception and to identify the method they were currently using. As shown in Table 5.4, the contraceptive prevalence for currently married women in Swaziland is 51 percent. Most current users use a modern method ( 48 percent). The group with the highest contraceptive prevalence is sexually active unmarried women ( 65 percent), which is due to their greater use of the male condom.

Injectables, male condom, and the pill are the most popular methods of contraception among currently married women ( 17 percent, 12 percent, and 10 percent, respectively). The use of contraceptives increases with age. For currently married women, the percentage who use a modern contraceptive method is 43 percent for women age 15-19, rises to 65 percent among women age $30-34$, and then declines to 34 percent at age 45-49. The increase in use by age is notable for permanent or long-term methods, such as female sterilisation and IUD. Injectables and condoms are popular among women age 25-34.

| Percent distribution of all women, currently married women, and sexually active unmarried women age 15-49 by contraceptive method currently used, according to age, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Modern method |  |  |  |  |  |  |  |  | Any traditional method | Traditional method |  |  | Not currently using | Total | Number of women |
| Age | Any method | Any modern method | Female sterilization | Male sterilization | Pill | IUD | Injectables | $\begin{gathered} \text { Im- } \\ \text { plants } \end{gathered}$ | Male condom | Female condom | LAM |  | Billings/ mucus method | Withdrawal | Folk method |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 15.3 | 15.3 | 0.0 | 0.0 | 2.0 | 0.1 | 4.6 | 0.0 | 8.2 | 0.2 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 84.7 | 100.0 | 1,274 |
| 20-24 | 42.9 | 42.0 | 0.2 | 0.0 | 6.0 | 0.2 | 16.1 | 0.0 | 18.0 | 0.1 | 1.3 | 0.9 | 0.1 | 0.7 | 0.1 | 57.1 | 100.0 | 1,046 |
| 25-29 | 52.5 | 50.9 | 0.7 | 0.2 | 9.0 | 0.6 | 19.4 | 0.2 | 20.1 | 0.0 | 0.7 | 1.6 | 0.2 | 1.1 | 0.3 | 47.5 | 100.0 | 729 |
| 30-34 | 57.3 | 54.6 | 3.0 | 0.3 | 10.4 | 1.4 | 18.4 | 0.1 | 19.4 | 0.3 | 1.3 | 2.7 | 0.1 | 2.4 | 0.2 | 42.7 | 100.0 | 616 |
| 35-39 | 47.7 | 44.0 | 5.4 | 0.0 | 8.4 | 1.3 | 14.2 | 0.3 | 12.8 | 0.4 | 1.1 | 3.7 | 0.8 | 2.2 | 0.7 | 52.3 | 100.0 | 503 |
| 40-44 | 38.2 | 35.2 | 9.8 | 0.2 | 5.9 | 2.4 | 8.9 | 0.0 | 7.4 | 0.0 | 0.6 | 3.0 | 0.2 | 1.4 | 1.4 | 61.8 | 100.0 | 438 |
| 45-49 | 26.8 | 24.6 | 13.0 | 0.0 | 1.9 | 2.5 | 1.6 | 0.0 | 5.7 | 0.0 | 0.0 | 2.2 | 0.0 | 2.2 | 0.0 | 73.2 | 100.0 | 383 |
| Total | 37.9 | 36.3 | 2.9 | 0.1 | 5.9 | 0.9 | 12.0 | 0.1 | 13.6 | 0.1 | 0.8 | 1.6 | 0.2 | 1.1 | 0.3 | 62.1 | 100.0 | 4,987 |
| CURRENTLY MARRIED WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 42.8 | 42.8 | 0.0 | 0.0 | 11.2 | 0.0 | 20.9 | 0.0 | 10.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 57.2 | 100.0 | 88 |
| 20-24 | 46.7 | 44.6 | 0.6 | 0.0 | 8.1 | 0.0 | 20.8 | 0.0 | 12.9 | 0.0 | 2.1 | 2.1 | 0.3 | 1.4 | 0.4 | 53.3 | 100.0 | 343 |
| 25-29 | 53.7 | 51.7 | 0.9 | 0.3 | 11.7 | 0.7 | 24.4 | 0.4 | 12.6 | 0.0 | 0.8 | 2.0 | 0.2 | 1.5 | 0.3 | 46.3 | 100.0 | 388 |
| 30-34 | 64.9 | 61.5 | 3.6 | 0.5 | 15.2 | 2.0 | 21.1 | 0.2 | 17.3 | 0.5 | 1.1 | 3.4 | 0.2 | 3.1 | 0.0 | 35.1 | 100.0 | 379 |
| 35-39 | 56.0 | 52.2 | 7.3 | 0.0 | 11.0 | 1.3 | 17.5 | 0.2 | 13.8 | 0.3 | 0.9 | 3.8 | 0.6 | 2.6 | 0.6 | 44.0 | 100.0 | 334 |
| 40-44 | 42.3 | 38.2 | 11.8 | 0.3 | 6.8 | 2.6 | 9.0 | 0.0 | 7.4 | 0.0 | 0.3 | 4.1 | 0.3 | 2.1 | 1.7 | 57.7 | 100.0 | 291 |
| 45-49 | 34.4 | 30.9 | 16.9 | 0.0 | 2.6 | 3.0 | 2.1 | 0.0 | 6.2 | 0.0 | 0.0 | 3.6 | 0.0 | 3.6 | 0.0 | 65.6 | 100.0 | 238 |
| Total | 50.6 | 47.7 | 5.8 | 0.2 | 9.9 | 1.4 | 17.2 | 0.1 | 12.2 | 0.1 | 0.9 | 2.9 | 0.3 | 2.2 | 0.4 | 49.4 | 100.0 | 2,062 |
| SEXUALLY ACTIVE UNMARRIED WOMEN ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 55.7 | 55.7 | 0.0 | 0.0 | 6.4 | 0.0 | 12.8 | 0.0 | 35.3 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 44.3 | 100.0 | 98 |
| 20-24 | 61.6 | 60.4 | 0.0 | 0.0 | 6.4 | 1.1 | 18.1 | 0.0 | 33.6 | 0.4 | 0.7 | 1.2 | 0.0 | 1.2 | 0.0 | 38.4 | 100.0 | 193 |
| 25-29 | 78.1 | 75.4 | 0.0 | 0.0 | 10.6 | 0.9 | 20.4 | 0.0 | 42.3 | 0.0 | 1.2 | 2.6 | 0.0 | 1.9 | 0.7 | 21.9 | 100.0 | 112 |
| 30-34 | 73.4 | 72.2 | 4.3 | 0.0 | 2.9 | 0.0 | 22.4 | 0.0 | 39.1 | 0.0 | 3.6 | 1.2 | 0.0 | 1.2 | 0.0 | 26.6 | 100.0 | 77 |
| 35-39 | (57.7) | (51.0) | (6.0) | (0.0) | (7.4) | (4.4) | (13.7) | (0.0) | (19.4) | (0.0) | (0.0) | (6.7) | (1.8) | (4.9) | (0.0) | (42.3) | 100.0 | 45 |
| 40-44 | (59.0) | (59.0) | (10.6) | (0.0) | (19.0) | (0.0) | (13.6) | (0.0) | (15.8) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (41.0) | 100.0 | 31 |
| 45-49 | * | * | * | * | * | * | - | * | * | * | * | * | * | * | * | * | 100.0 | 16 |
| Total | 64.5 | 62.9 | 1.9 | 0.0 | 7.5 | 0.9 | 17.3 | 0.0 | 33.9 | 0.4 | 1.0 | 1.6 | 0.1 | 1.3 | 0.1 | 35.5 | 100.0 | 573 |
| Note: If more than one method is used, only the most effective method is considered in this tabulation. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases. <br> LAM $=$ Lactational amenorrhea method <br> ${ }^{1}$ Women who have had sexual intercourse within 30 days preceding the survey |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Figure 5.2 compares the modern contraceptive prevalence of all women in Swaziland with the prevalence in other countries in south-east Africa for which data are available. It is clear that contraceptive use in Swaziland is among the highest in the region, lower only than that in Namibia and Zimbabwe.

Table 5.5 and Figure 5.3 present the distribution of currently married women by level of contraceptive use, according to selected background characteristics. Contraceptive use among urban women ( 53 percent) is higher than among rural women (48 percent). The most popular methods for urban women are male condom ( 20 percent), injectables ( 14 percent), and the pill ( 11 percent). In the rural areas, women are more likely to use injectables ( 18 percent), followed by the pill ( 10 percent) and male condom ( 9 percent). The contraceptive prevalence rate is highest in Manzini and Hhohho regions (54 percent and 53 percent, respectively). The CPR is 48 percent in Lubombo and 46 percent in Shiselweni.

Figure 5.2 Contraceptive Prevalence of Modern Methods Among All Women for Selected Countries in Southeast Africa


SDHS 2006-07

Use of contraception is clearly related to a woman's education. Women with the least education are the least likely to use contraception ( 29 percent) and those with the highest education are the most likely to use some form of family planning ( 74 percent). When comparing CPR by parity, Table 5.5 shows that CPR for women with no children is lower than for those with 1-2 and 3-4 children (28 percent compared with 50 percent and 61 percent, respectively). Women with five or more children have a lower CPR (48 percent) than those with fewer children. The data also show that contraceptive use increases with increasing wealth status.

| Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Modern method |  |  |  |  |  |  |  |  | Any traditional method | Traditional method |  |  | $\begin{aligned} & \text { Not } \\ & \text { currently } \\ & \text { using } \\ & \hline \end{aligned}$ | Total | Number <br> of <br> women |
| Background characteristic | Any method | Any modern method | Female sterilization | Male sterilization | Pill | IUD | Injectables | $\begin{gathered} \text { Im- } \\ \text { plants } \end{gathered}$ | Male condom | Female condom | LAM |  | Billings/ mucus method | Withdrawal | Folk method |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 58.1 | 55.8 | 8.2 | 0.5 | 10.6 | 1.9 | 13.7 | 0.6 | 19.8 | 0.0 | 0.4 | 2.4 | 0.7 | 1.7 | 0.0 | 41.9 | 100.0 | 542 |
| Rural | 48.0 | 44.8 | 4.9 | 0.1 | 9.6 | 1.2 | 18.4 | 0.0 | 9.4 | 0.2 | 1.1 | 3.1 | 0.1 | 2.4 | 0.6 | 52.0 | 100.0 | 1,520 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 53.7 | 50.6 | 5.2 | 0.6 | 10.9 | 1.4 | 17.7 | 0.1 | 13.0 | 0.5 | 1.1 | 3.1 | 0.2 | 2.4 | 0.5 | 46.3 | 100.0 | 600 |
| Manzini | 52.5 | 49.3 | 5.2 | 0.0 | 10.4 | 1.9 | 15.1 | 0.4 | 15.7 | 0.0 | 0.6 | 3.3 | 0.3 | 2.9 | 0.1 | 47.5 | 100.0 | 650 |
| Shiselweni | 45.6 | 42.1 | 5.5 | 0.0 | 7.2 | 0.9 | 18.0 | 0.0 | 9.4 | 0.0 | 1.1 | 3.5 | 0.6 | 2.2 | 0.7 | 54.4 | 100.0 | 363 |
| Lubombo | 48.0 | 46.1 | 7.5 | 0.0 | 9.8 | 1.1 | 18.8 | 0.0 | 8.0 | 0.0 | 1.0 | 1.8 | 0.2 | 1.0 | 0.7 | 52.0 | 100.0 | 449 |
| Highest educational level |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 28.9 | 26.5 | 5.8 | 0.0 | 6.1 | 0.6 | 7.6 | 0.0 | 4.7 | 0.4 | 1.3 | 2.4 | 0.0 | 1.5 | 0.9 | 71.1 | 100.0 | 247 |
| Lower primary | 36.3 | 32.1 | 6.1 | 0.0 | 6.5 | 0.0 | 13.9 | 0.0 | 4.4 | 0.0 | 1.1 | 4.2 | 0.0 | 4.2 | 0.0 | 63.7 | 100.0 | 176 |
| Higher primary | 45.6 | 43.6 | 4.0 | 0.0 | 7.9 | 1.0 | 18.9 | 0.0 | 11.3 | 0.0 | 0.5 | 1.9 | 0.2 | 1.4 | 0.3 | 54.4 | 100.0 | 538 |
| Secondary | 56.1 | 52.8 | 4.3 | 0.0 | 11.5 | 1.2 | 21.1 | 0.0 | 12.9 | 0.2 | 1.6 | 3.3 | 0.3 | 2.5 | 0.5 | 43.9 | 100.0 | 600 |
| High School | 60.0 | 55.7 | 6.7 | 0.7 | 11.4 | 2.0 | 17.8 | 0.0 | 16.8 | 0.3 | 0.0 | 4.3 | 1.0 | 3.0 | 0.3 | 40.0 | 100.0 | 304 |
| Tertiary | 73.7 | 71.6 | 13.0 | 0.9 | 15.7 | 4.2 | 14.4 | 1.5 | 21.3 | 0.0 | 0.5 | 2.1 | 0.0 | 1.4 | 0.7 | 26.3 | 100.0 | 197 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 27.6 | 26.1 | 1.9 | 0.0 | 2.0 | 0.0 | 4.0 | 0.0 | 18.1 | 0.0 | 0.0 | 1.5 | 0.0 | 0.7 | 0.8 | 72.4 | 100.0 | 166 |
| 1-2 | 49.8 | 48.3 | 1.0 | 0.3 | 11.1 | 1.3 | 20.4 | 0.3 | 13.2 | 0.1 | 0.7 | 1.5 | 0.1 | 1.4 | 0.0 | 50.2 | 100.0 | 772 |
| 3-4 | 60.7 | 56.4 | 7.8 | 0.3 | 11.0 | 1.7 | 20.5 | 0.1 | 13.7 | 0.2 | 1.1 | 4.3 | 0.8 | 3.2 | 0.3 | 39.3 | 100.0 | 570 |
| 5+ | 48.3 | 44.3 | 11.4 | 0.0 | 9.4 | 1.7 | 13.2 | 0.0 | 7.2 | 0.2 | 1.3 | 4.0 | 0.0 | 2.9 | 1.1 | 51.7 | 100.0 | 554 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 37.2 | 35.7 | 2.3 | 0.0 | 5.5 | 0.0 | 20.8 | 0.0 | 4.4 | 0.0 | 2.8 | 1.5 | 0.0 | 0.9 | 0.5 | 62.8 | 100.0 | 353 |
| Second | 42.9 | 40.7 | 4.1 | 0.0 | 9.0 | 1.1 | 16.5 | 0.0 | 8.4 | 0.3 | 1.2 | 2.2 | 0.2 | 2.0 | 0.0 | 57.1 | 100.0 | 369 |
| Middle | 54.2 | 50.3 | 7.1 | 0.0 | 12.1 | 0.4 | 19.9 | 0.0 | 9.7 | 0.2 | 0.8 | 3.9 | 0.4 | 2.9 | 0.6 | 45.8 | 100.0 | 379 |
| Fourth | 50.7 | 47.2 | 4.5 | 0.0 | 10.1 | 1.9 | 16.1 | 0.0 | 14.4 | 0.2 | 0.0 | 3.5 | 0.2 | 2.7 | 0.5 | 49.3 | 100.0 | 424 |
| Highest | 62.2 | 59.0 | 9.2 | 0.7 | 11.6 | 2.8 | 14.2 | 0.6 | 19.7 | 0.0 | 0.2 | 3.2 | 0.4 | 2.3 | 0.6 | 37.8 | 100.0 | 537 |
| Total | 50.6 | 47.7 | 5.8 | 0.2 | 9.9 | 1.4 | 17.2 | 0.1 | 12.2 | 0.1 | 0.9 | 2.9 | 0.3 | 2.2 | 0.4 | 49.4 | 100.0 | 2,062 |
| Note: If more than one method is used, only the most effective method is considered in this tabulation. LAM = Lactational amenorrhea method |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Figure 5.3 Contraceptive Prevalence Rates Among Currently Married Women Age 15-49


Table 5.6 and Figure 5.4 show that contraceptive use has declined slightly from 40 percent in 2002 to 38 percent in 2007. While male condom and injectables remain the most popular methods, decline in the use of these methods has contributed to the overall decline in contraceptive prevalence in the country.

| Table 5.6 Trends in current use of contraception |  |  |
| :--- | ---: | :---: |
| Percent distribution of women age | 15-49 by |  |
| contraceptive method currently used, according |  |  |
| to several surveys |  |  |
|  |  |  |
| Method | 2002 | $2006-07$ |
| Any method | 40.1 | 37.9 |
| Any modern method | 38.6 | 36.3 |
| Male condom | 16.2 | 13.6 |
| Injectables | 13.5 | 12.0 |
| Female sterilisation | 2.2 | 2.9 |
| Pill | 5.6 | 5.9 |
| IUD | 0.9 | 1.9 |
| Other modern methods ${ }^{1}$ |  |  |
| Any traditional method | 1.5 | 1.6 |
| $\quad$ Rhythm | 0.4 | 0.2 |
| Withdrawal | 0.6 | 1.1 |
| Other |  |  |
| Not currently using | 0.5 | 0.3 |
| Total | 58.9 | 62.1 |
| Number of women | 100.0 | 100.0 |

${ }^{1}$ Male sterilisation, implants, female condom, lactational amenorrhea method (LAM), emergency contraception, and other modern methods
SCHS = Swaziland Community Health Survey

Figure 5.4 Trends in Current Contraceptive Use Among Currently Married Women

${ }^{1}$ Male sterilization, implants, female condom, lactational amenorrhea method (LAM), emergency contraception, and other modern methods

SDHS 2006-07

### 5.4 Number of Children at First Use of Contraception

Couples use family planning methods to either limit family size or delay the next birth. Couples using family planning as a means to control family size (i.e., to stop having children) adopt contraception when they have already had the number of children they want. When contraception is used to space births, couples may start to use family planning earlier with the intention of delaying a possible pregnancy. This may be done before a couple has had their desired number of children. In a culture where smaller family size is becoming the norm, young women adopt family planning at an earlier age than their older counterparts.

Women interviewed in the 2006-07 SDHS were asked how many children they had at the time they first used a method of family planning. Table 5.7 shows the percent distribution of women by number of living children at the time of first use of contraception, according to current age. Overall, 29 percent of women never used contraception, 14 percent started using a family planning method before they had a child, and the majority ( 34 percent) started after having one child.

Women start using contraception at a younger age; while 26 percent of women age 20-24 started using contraception before they had any children, the corresponding number for women age 30-34 is 7 percent, and for women 45-49 is 3 percent.

Table 5.7 Number of children at first use of contraception
Percent distribution of women age 15-49 by number of living children at the time of first use of contraception, according to current age, Swaziland 2006-07


### 5.5 Use Of Social Marketing Brands

The Swaziland family planning programme provides a variety of contraceptive pills, which includes the mini pills, the low dose combined, and the standard dose pills. Those women who reported being on the pill were asked to indicate which type of pill they were using. Table 5.8.1 shows that of the 292 women who are using the pill, 42 percent use Lo-femenal (a low dose combined pill), and 20 percent each use Ovral (standard dose combined pill) and other types of pill.

More than half of male respondents who reported using condoms as a method of contraception use Trust brand ( 53 percent), followed by the government-distributed condoms ( 21 percent). The other identifiable condom brand is Lovers, used by 5 percent of men (Table 5.8.2). The Trust and Lovers condoms are distributed by PSI through social marketing programmes and the government condom is distributed through a variety of distribution points including health facilities.

| Table 5.8.1 | Brand of pills used |
| :--- | :---: |
| Percent distribution of pill users |  |
| by brand of pill used, Swaziland |  |
| $2006-07$ |  |
| Brand name | Percent |
| Lo-femenal | 42.1 |
| Ovral | 20.1 |
| Other | 19.7 |
| Don't know | 13.7 |
| Missing | 4.5 |
| Total | 100.0 |
| Number of women | 292 |


| Table 5.8.2 Brand of condoms |  |
| :---: | :---: |
| used |  |
| Percent distribution male/female condom of condom used 2006-07 | of users of by brand Swaziland |
| Brand name | Percent |
| Trust | 53.1 |
| Government | 21.4 |
| Lovers | 5.0 |
| Other | 9.8 |
| Don't know | 9.1 |
| Missing | 1.6 |
| Total | 100.0 |
| Number of women | 685 |

### 5.6 Disposal of Condoms

Women who reported condom use were further asked how they disposed of the used condoms. Table 5.9 shows that 68 percent of women disposed of the condoms in a pit latrine, followed by flushing them in the toilet ( 13 percent). A smaller percentage ( 8 percent) burned the used condoms and 4 percent or less threw them away or buried them.

### 5.7 Knowledge of the Fertile Period

An elementary knowledge of reproductive physiology provides a useful background for successful practice of coitus-associated methods such as withdrawal and condoms. Such knowledge is particularly critical in the use of the rhythm method. The 2006-07 SDHS included a question designed to obtain information on the respondent's understanding of when a woman is most likely to become pregnant during the menstrual cycle.

| Table 5.9 |  |  | Mode of disposal of |
| :--- | :---: | :---: | :---: |
| condoms |  |  |  |
| Percent distribution of users of |  |  |  |
| male/female condoms by mode of |  |  |  |
| disposal for used | condoms, |  |  |
| Swaziland 2006-07 |  |  |  |
| Mode of disposal | Percent |  |  |
| Burn |  |  |  |
| Flush in toilet | 8.4 |  |  |
| Bury in hole | 13.0 |  |  |
| Throw away | 3.4 |  |  |
| Pit latrine | 3.6 |  |  |
| Other | 67.9 |  |  |
| Missing | 2.5 |  |  |
| Total | 1.3 |  |  |
| Number of women | 685 |  |  | Respondents were asked, "From one menstrual period to the next, are there certain days when a woman is more likely to get pregnant if she has sexual relations?" If the answer was "yes," they were further asked whether that time was just before her period begins, during her period, right after her period has ended, or halfway between two periods. Table 5.10 provides the results for women and men regardless of whether they are currently using the rhythm method or not.

It is important to note that a large proportion of women and men in Swaziland have no knowledge of the fertile period. One in four women ( 26 percent) and 29 percent of men do not know about the monthly fertile period. In addition, 28 percent of women and 20 percent of men can give no specific time, and 24 percent of women and 28 percent of men gave the wrong response, that a woman's fertile period is right after her menstrual period has ended. Only 9 percent of women and 7 percent of men correctly stated that the fertile period is halfway between two menstrual periods.

### 5.8 Timing of Sterilisation

| Table 5.10 Knowledge of fertile period |  |  |
| :--- | :---: | :---: |
| Percent distribution of women age 15-49 by knowledge of the |  |  |
| fertile period during the ovulatory cycle, Swaziland 2006-07 |  |  |
| Perceived fertile period | Women | Men |
| Just before her menstrual period begins | 11.0 | 13.6 |
| During her menstrual period | 1.6 | 2.4 |
| Right after her menstrual period has ended | 23.9 | 27.8 |
| Halfway between two menstrual periods | 9.1 | 7.0 |
| Other | 0.0 | 0.3 |
| No specific time | 27.9 | 19.7 |
| Don't know | 26.3 | 29.1 |
| Missing | 0.2 | 0.2 |
|  |  |  |
| Total | 100.0 | 100.0 |
| Number | 4,987 | 4,156 |

Women who reported that they use female sterilisation as a contraceptive method were asked additional questions about how old they were when the procedure was performed. Overall, most women had a sterilisation operation when they were in their thirties, 33 percent at age $30-34$, and 30 percent at age 35-39 (data not shown).

### 5.9 Source of Contraception

Information on where women obtain their contraceptives is useful for family planning programme managers and implementers for logistic planning. In the SDHS, women who reported using a modern contraceptive method at the time of the survey were asked where they obtained the method the last time they acquired it. Since some women may not know in which category the source they use falls (e.g., government or private, health centre or clinic), interviewers were instructed to note the full name of the source or facility. Supervisors and field editors were told to verify that the name and source type were
consistent, asking informants in the clusters for the names of local family planning outlets, if necessary. This practice was designed to improve the accuracy of source reporting.

Table 5.11 shows that public (government) facilities provide contraceptives to 45 percent of users, while 14 percent are supplied through private medical sources, 9 percent through Missions, 9 percent through Non-Government Organisations (NGOs), and 22 percent through other private sources (e.g., shops). The most common single source of contraceptives in Swaziland is PHU/clinic, which supply about one-quarter of all users of modern methods ( 25 percent). Shops supply 15 percent of users, followed by government hospitals ( 9 percent).

As expected, government sources supply a larger proportion of users of longterm methods, such as female sterilisation, followed closely by Mission hospital/clinic (38 percent). PHU/clinic supplies most of the pills ( 42 percent) and injectables (44 percent). More than half of all condom users get their supplies from private, nonmedical sources, such as shops ( 38 percent).

### 5.10 Cost of Contraceptives

One of the indicators of desire to use contraception is self-reliance, which is measured by the proportion of users who pay for the methods and services they are using. The cost of contraceptives can be a

| Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to method, Swaziland 2006-07 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Source | Female sterilization | Pill | Injectables | Male condom | Total |
| Public | 40.2 | 60.4 | 68.1 | 19.5 | 44.6 |
| Government hospital | 36.6 | 4.5 | 9.6 | 4.1 | 8.9 |
| Government health centre | 3.6 | 11.1 | 11.9 | 3.1 | 7.5 |
| PHU/clinic | 0.0 | 41.9 | 44.4 | 8.4 | 25.4 |
| Mobile clinic | 0.0 | 2.3 | 2.2 | 0.4 | 1.3 |
| RHM/CBD | 0.0 | 0.6 | 0.0 | 2.6 | 1.1 |
| Other public | 0.0 | 0.0 | 0.0 | 1.0 | 0.4 |
| Private medical | 18.1 | 19.6 | 11.2 | 11.8 | 13.7 |
| Private hospital | 16.9 | 10.5 | 8.5 | 2.3 | 7.4 |
| Pharmacy | 0.0 | 4.9 | 0.7 | 9.0 | 4.5 |
| Private doctor | 0.7 | 3.7 | 2.0 | 0.2 | 1.5 |
| Mobile clinic | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 |
| CBD | 0.0 | 0.4 | 0.0 | 0.3 | 0.2 |
| Other private | 0.6 | 0.1 | 0.0 | 0.0 | 0.1 |
| Mission | 37.5 | 8.1 | 10.9 | 2.5 | 9.1 |
| Mission hospital/clinic | 37.5 | 2.5 | 2.4 | 1.9 | 5.1 |
| Mission clinic | 0.0 | 5.6 | 8.4 | 0.6 | 4.0 |
| NGO's | 1.6 | 10.4 | 8.2 | 4.2 | 8.8 |
| FLAS | 1.6 | 8.7 | 7.0 | 3.1 | 6.7 |
| Other NGO's | 0.0 | 1.7 | 1.1 | 1.1 | 1.1 |
| Other | 0.0 | 0.2 | 1.8 | 57.2 | 22.0 |
| Shop | 0.0 | 0.0 | 0.2 | 38.1 | 14.7 |
| Friend/relative | 0.0 | 0.0 | 0.0 | 3.3 | 1.3 |
| Don't know | 1.0 | 0.0 | 0.0 | 15.0 | 5.8 |
| Missing | 1.6 | 1.3 | 1.6 | 0.8 | 1.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 145 | 292 | 598 | 678 | 1,771 |
| ${ }^{1}$ Total includes other modern methods but excludes lactational amenorrhea method (LAM). <br> PHU = Public Health Unit <br> RHM/CBD $=$ Rural Health Motivators/ Community-based distributors <br> NGO $=$ Non-governmental organisation <br> FLAS $=$ Family Life Association of Swaziland |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  | deterrent to the use of contraception. In the 2006-07 SDHS, current users were asked where they obtained the current method the last time and how much they paid for the method and for services. Table 5.12 shows that overall, 38 percent of contraceptive users obtained their method free of charge. The proportion does not vary much across methods ( 31 percent to 38 percent), except female sterilisation (16 percent) which is the only contraceptive method that is supposed to be provided free of charge in public sector health facilities in Swaziland.

While government sources are supposed to provide the methods free of charge, only 48 percent of woman who obtained the method from a public source obtained the method for free. Nineteen percent of women who obtained their methods from a private facility did not pay for the methods and services. Data in the table also show that 20 percent of women who were sterilised in a government facility did not pay for the operation and other services. More than half of pill users ( 53 percent), 40 percent of users of injectables, and 79 percent of condom users obtained their methods from a public-sector facility free of charge.

Analysis of the cost of contraceptives is hampered by the large proportion of women who can not report the cost for specific methods. Female sterilisation was reported to cost on average (emalangeni) E67 in the public sector and E391 in the private sector. The pill costs E5 per package and injectables cost E 2 in the private sector.

| Table 5.12 Cost of modern contraceptive methods |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of current users of modern contraception age 15-49 who did not pay for the method and who do not know the cost of the method and the median cost of the method by current method, according to source of current method, Swaziland 2006-07 |  |  |  |  |  |
| Source of method/cost | Female sterilization | Pill | Injectables | Male condom | Total |
| Public sector |  |  |  |  |  |
| Percentage free | 20.0 | 53.4 | 39.9 | 79.4 | 48.3 |
| Do not know cost | 22.4 | 0.4 | 0.6 | 6.5 | 3.3 |
| Median cost (in Emalangeni) ${ }^{1}$ | 66.6 | - | - | - |  |
| Number of women | 58 | 177 | 407 | 132 | 791 |
| Private medical sector/other |  |  |  |  |  |
| Percentage free | 13.6 | 13.9 | 22.3 | 19.4 | 18.6 |
| Do not know cost | 29.4 | 6.2 | 4.3 | 26.9 | 19.6 |
| Median cost (in Emalangeni) ${ }^{1}$ | 390.9 | 5.0 | 1.7 | - | - |
| Number of women | 87 | 116 | 191 | 546 | 980 |
| Total |  |  |  |  |  |
| Percentage free | 16.2 | 37.7 | 34.3 | 31.1 | 31.8 |
| Do not know cost | 26.6 | 2.7 | 1.8 | 22.9 | 12.3 |
| Median cost (in Emalangeni) ${ }^{1}$ | 120 | - | - | - | - |
| Number of women | 145 | 292 | 598 | 678 | 1,771 |
| Note: Table excludes other modern methods but excludes lactational amenorrhoea method (LAM). Costs are based on the last time current users obtained method. Costs include consultation costs, if any. For condom, costs are per package; for pills, per cycle. For sterilisation, data are based on women who received the operation in the 5 years before the survey. <br> ${ }^{1}$ Median cost is based only on those women who reported a cost (excludes those who received the method free of charge) |  |  |  |  |  |

### 5.11 INFORMED CHOICE

Current users of modern methods who are well informed about the side effects and problems associated with methods and know of a range of method options are better able to make an informed choice about the method they would like to use. Current users of various modern contraceptive methods were asked whether, at the time they adopted the particular method, they were informed about potential side effects or problems with the method. Table 5.13 shows the percentage of current users of modern methods who were informed about side effects or problems of the method used, informed about what to do if they experienced side effect, informed of other methods they could use, and informed that sterilisation is a permanent method. These are broken down by method type and source of the method.

| Table 5.13 Informed choice |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Among current users of modern methods age 15-49 who started the last episode of use within the five years preceding the survey, percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods that could use, by method and source; and among sterilised women, the percentage who were informed that the method is permanent, by initial source of method, Swaziland 2006-07 |  |  |  |  |
| Among women who started last episode of modern contraceptive method within five years preceding the survey: |  |  |  |  |
| Method/source | Percentage who were informed about side effects or problems of method used | Percentage who were informed about what to do if experienced side effects | Percentage who were informed by a health or family planning worker of other methods that could be used | Number of women |
| Method |  |  |  |  |
| Female sterilisation | 43.2 | 44.6 | 52.2 | 62 |
| Pill | 53.2 | 46.6 | 68.3 | 260 |
| Injectables | 61.5 | 59.4 | 69.7 | 529 |
| Other modern methods | na | na | (41.6) | 47 |
| Initial source of method ${ }^{1}$ |  |  |  |  |
| Public | 59.1 | 54.5 | 70.5 | 561 |
| Government hospital | 61.6 | 60.8 | 76.7 | 91 |
| Government health centre | 61.7 | 56.4 | 66.2 | 96 |
| PHU/clinic | 57.9 | 52.7 | 70.0 | 354 |
| Other ${ }^{2}$ | * | * | * | 19 |
| Private medical | 60.5 | 59.3 | 68.3 | 123 |
| Private hospital | 58.3 | 56.9 | 69.4 | 85 |
| Private doctor | * | * | * | 19 |
| Other ${ }^{3}$ | * | * | * | 18 |
| Mission | 47.3 | 48.7 | 55.5 | 97 |
| Mission hospital/clinic | 49.2 | 51.3 | 51.6 | 38 |
| Mission clinic | 46.1 | 47.0 | 58.1 | 59 |
| NGO's | 68.7 | 62.5 | 74.7 | 82 |
| FLAS | 66.2 | 60.9 | 74.9 | 72 |
| Other ${ }^{4}$ | * | * | * | 26 |
| Total | 58.0 | 54.5 | 66.5 | 878 |
| Note: Table excludes users who obtained their method from friends/relatives. Figures in parentheses are based on 25-49 unweighetd cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. <br> na $=$ Not applicable |  |  |  |  |
| PHU = Public Health Unit |  |  |  |  |
| NGO $=$ Non-governmental organisation |  |  |  |  |
| FLAS $=$ Family Life Association of Swaziland |  |  |  |  |
| ${ }^{1}$ Source at start of current episode of use |  |  |  |  |
| ${ }^{2}$ Includes mobile clinic, rural health motivators/community-based distributors (RHM/CBD), and other public sources |  |  |  |  |
| ${ }^{3}$ Includes pharmacy, private mobile clinic, CBD and other private sources |  |  |  |  |
| ${ }^{4}$ Includes other NGOs, shop, friends/relatives, don't know and missing |  |  |  |  |

The data indicate that 58 percent of women who started using a method in the five years preceding the survey were informed about side effects of the method, 55 percent were told about what action to take in case of problems, and 67 percent were informed of other available methods of contraception.

Users of injectables are more likely than women who were sterilised and users of the pill to be given the necessary information. On the other hand, women who were sterilised are the least likely to be informed of the side effects of the operation, what action to take in case of problems, and other choices of contraception. Comparison between the initial sources of the method shows that health providers in the public sector are more likely to provide information on the methods than in the private sector.

### 5.12 Future Use of Contraception

An important indicator of the changing demand for family planning is the extent to which nonusers of contraception plan to use family planning in the future. Women who were not currently using a method of contraception were asked about their intention to use family planning in the future. A total of 62 percent of women indicate that they intend to use contraception in the future, 5 percent were not sure, and 32 percent do not plan to use contraception. The intention to use contraception in future is highest among women with one or two children ( 77 percent and 72 percent, respectively). The corresponding proportion among women with no children is 62 percent.

| Table 5.14 Future use of contraception |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| Percent distribution of currently married women age |  |  |  |  |  |  |  |  |
| contraceptive method by intention to use in the future, according to number of |  |  |  |  |  |  |  |  |
| living children, Swaziland $2006-07$ |  |  |  |  |  |  |  |  |

### 5.13 Reasons for Non-USE OF CONTRACEPTION

An understanding of the reasons why people do not use family planning methods is critical to design programmes that are effective in reaching women with unmet need and to improve the quality of family planning services. Table 5.15 shows currently married nonusers who do not intend to use a contraceptive method in the future by the main reasons for not intending to use family planning. Around 59 percent cited fertility-related reasons for not intending to use contraception. In particular, 40 percent said that the main reason for not intending to use was because they believe that they are either menopausal or they have had a hysterectomy (23 percent), or they had low fertility or could not get pregnant (17 percent). In addition, 11 percent of married women not using a contraceptive method cited infrequent sex and 11 percent cited health concerns as their main reason for having no intention to use a method.

Table 5.15 Reason for not intending to use contraception in the future

Percent distribution of currently married women age 15-49 who are not using contraception and who do not intend to use in the future by main reason for not intending to use, Swaziland 2006-07

|  | Percent <br> distribution |
| :--- | :---: |
| Reason | 59.1 |
| Fertility-related reasons | 10.9 |
| Infrequent sex/no sex | 23.0 |
| Menopausal/had hysterectomy | 17.3 |
| Subfecund/infecund | 7.9 |
| Wants as many children as possible | 11.7 |
| Opposition to use | 2.1 |
| Respondent opposed | 8.3 |
| Husband/partner opposed | 0.1 |
| Others opposed | 1.2 |
| Religious prohibition | 23.2 |
| Method-related reasons | 10.9 |
| Health concerns | 8.3 |
| Fear of side effects | 0.4 |
| Cost too much | 0.9 |
| Inconvenient to use | 2.7 |
| Interfere with body's normal process | 5.9 |
| Other | 3.9 |
| Other | 1.5 |
| Don't know | 0.5 |
| Missing | 100.0 |
| Total | 330 |

### 5.14 Preferred Method of Contraception for Future Use

Demand for specific methods can be assessed by asking nonusers which methods they intend to use in the future. Table 5.16 presents information on method preference among currently married women who are not using a contraceptive method but say they intend to use in the future. Almost half ( 47 percent) of married women who intend to use a contraceptive but were not using one at the time of the survey say the method they intend to use is injectables. Fourteen percent of women intend to use the pill, and 14 percent intend to use condoms. Nine percent of women are unsure which method they intend to use.

### 5.15 Exposure to Family Planning Messages

The media can be a major source of family planning messages. Information about public exposure to messages on a particular type of media allows policymakers to use the most effective means of communication for various target groups in the population. To assess

Table 5.16 Preferred method of contraception for future use

Percent distribution of currently married women age 15-49 who are not using a contraceptive method but who intend to use in the future by preferred method, Swaziland 2006-07

| Method | Percent <br> distribution |
| :--- | :---: |
| Female sterilisation | 8.8 |
| Pill | 14.1 |
| IUD | 3.0 |
| Injectables | 47.4 |
| Implants | 0.2 |
| Condom | 13.5 |
| Female condom | 0.6 |
| Diaphragm | 0.5 |
| Withdrawal | 2.0 |
| Other | 1.5 |
| Unsure | 8.6 |
|  |  |
| Total | 100.0 |
| Number of women | 631 | the effectiveness of electronic and print sources on the dissemination of family planning information, respondents in the 2006-07 SDHS were asked if they had heard or seen family planning messages on the radio, or television, or read a family planning message in a newspaper or magazine in the six months leading up to the survey. They were also asked if they had seen messages on family planning in billboards, pamphlets, T-shirts, or other sources. The results for women are shown in Table 5.17.1. SDHS respondents were widely exposed to information about family planning. For example, 86 percent of women were exposed to any type of media. One-quarter of women were not exposed to a family planning message on any of these types of media in the months preceding the survey. Media messages about family planning information are largely accessed through radio with lesser access through the print media. For example, 69 percent of women had recently heard about family planning on the radio and only 33 percent of women got such information from newspapers or magazines.

Exposure to media messages varies by the woman's background characteristics. For instance, younger women are less likely to have been exposed to any information than older women. Women age 15-19 are least likely of all age groups to be exposed to any media. Rural women and women who live in Shiselweni are less likely than other women to have access to media messages on family planning. The woman's education and wealth status has a positive relationship to the three media. Women in the lowest wealth quintile are the least likely to be exposed to any information on family planning, while women in the highest quintile are the most likely to be exposed to any messages on family planning.

Table 5.17.1 Exposure to family planning messages: Women 15-49
Percentage of women age 15-49 who heard or saw a family planning message on various media in the past six months, according to background characteristics, Swaziland 2006-07

| Background characteristic | Radio, television or newspaper/magazine |  |  |  | Other sources of family planning messages |  |  |  |  |  | Percentage exposed to any information source | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | News- <br> paper/ <br> maga- <br> zine | None of these three media sources |  |  |  |  |  |  |  |  |
|  | Radio | Television |  |  | Billboards | Posters | Pamphlets | T-shirts | Other | None of these five sources |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 55.5 | 21.6 | 26.0 | 38.5 | 35.3 | 42.2 | 36.1 | 49.6 | 13.3 | 32.0 | 79.1 | 1,274 |
| 20-24 | 73.4 | 31.2 | 34.3 | 22.4 | 48.6 | 52.7 | 50.3 | 59.7 | 17.2 | 22.2 | 89.6 | 1,046 |
| 25-29 | 76.6 | 34.4 | 40.1 | 18.9 | 51.8 | 57.6 | 55.3 | 63.9 | 17.9 | 19.6 | 90.4 | 729 |
| 30-34 | 73.1 | 32.6 | 36.7 | 22.1 | 47.0 | 53.3 | 50.4 | 54.8 | 16.8 | 25.0 | 87.5 | 616 |
| 35-39 | 71.4 | 27.6 | 34.7 | 24.0 | 45.3 | 51.3 | 49.2 | 55.3 | 14.2 | 26.1 | 86.7 | 503 |
| 40-44 | 74.1 | 30.1 | 35.7 | 22.4 | 43.8 | 51.6 | 45.3 | 55.4 | 17.2 | 28.5 | 87.2 | 438 |
| 45-49 | 71.0 | 24.1 | 26.3 | 24.1 | 40.8 | 44.0 | 40.3 | 48.9 | 13.7 | 34.9 | 83.8 | 383 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 73.2 | 46.3 | 49.2 | 18.4 | 58.4 | 64.2 | 60.1 | 68.1 | 21.8 | 16.4 | 91.7 | 1,330 |
| Rural | 67.3 | 21.9 | 26.9 | 29.1 | 39.0 | 44.7 | 41.0 | 50.8 | 13.5 | 30.3 | 83.7 | 3,657 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 69.9 | 29.0 | 34.1 | 23.6 | 48.6 | 53.8 | 48.3 | 58.2 | 13.2 | 22.1 | 88.4 | 1,340 |
| Manzini | 75.9 | 38.5 | 43.0 | 19.8 | 53.4 | 59.4 | 55.9 | 60.7 | 21.1 | 19.9 | 89.9 | 1,647 |
| Shiselweni | 61.0 | 18.2 | 22.1 | 35.9 | 35.0 | 40.1 | 37.4 | 47.3 | 12.3 | 35.6 | 79.6 | 1,033 |
| Lubombo | 64.2 | 21.1 | 25.5 | 30.7 | 31.9 | 38.8 | 35.6 | 51.4 | 13.5 | 34.5 | 82.0 | 966 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 60.1 | 9.0 | 5.8 | 39.1 | 14.6 | 18.1 | 18.8 | 20.7 | 3.9 | 64.1 | 69.9 | 402 |
| Lower primary | 56.2 | 11.3 | 9.5 | 41.9 | 20.8 | 25.3 | 20.7 | 27.4 | 6.2 | 55.4 | 67.5 | 360 |
| Higher primary | 61.9 | 15.9 | 17.5 | 35.0 | 30.7 | 36.2 | 31.2 | 45.4 | 10.6 | 35.7 | 80.4 | 1,268 |
| Secondary | 73.4 | 30.6 | 36.5 | 22.1 | 49.5 | 54.5 | 51.3 | 62.7 | 16.9 | 18.1 | 90.1 | 1,693 |
| High School | 76.7 | 42.4 | 53.5 | 16.0 | 61.6 | 70.4 | 65.3 | 72.8 | 23.3 | 9.2 | 95.5 | 894 |
| Tertiary | 75.7 | 65.1 | 71.2 | 10.7 | 78.3 | 84.4 | 81.3 | 80.1 | 31.2 | 7.1 | 96.6 | 370 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 53.1 | 6.0 | 11.7 | 45.3 | 23.9 | 28.3 | 24.3 | 33.6 | 6.7 | 47.5 | 71.1 | 785 |
| Second | 64.7 | 8.2 | 18.7 | 33.4 | 29.3 | 36.0 | 36.3 | 46.7 | 12.0 | 36.7 | 80.9 | 862 |
| Middle | 70.6 | 16.7 | 26.6 | 25.5 | 40.3 | 44.2 | 41.6 | 50.6 | 12.7 | 28.0 | 87.5 | 968 |
| Fourth | 76.8 | 36.1 | 38.8 | 19.4 | 51.1 | 57.6 | 52.1 | 63.8 | 17.5 | 20.0 | 89.8 | 1,111 |
| Highest | 73.4 | 58.2 | 55.4 | 16.2 | 63.7 | 70.3 | 64.5 | 71.4 | 24.5 | 11.4 | 93.6 | 1,262 |
| Total 15-49 | 68.9 | 28.4 | 32.9 | 26.3 | 44.1 | 49.9 | 46.1 | 55.5 | 15.7 | 26.6 | 85.8 | 4,987 |

Table 5.17.2 shows the same information for men. In general, women have better exposure to family planning messages in the mass media than men. Table 5.17.2 also shows that differences in access to media among men are similar to that of women. For instance, younger men, men who live in rural areas, those with less education and men in the lower wealth quintiles are less likely to be exposed to media messages on family planning than other men.

| Table 5.17.2 Exposure to family planning messages: Men 15-49 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage men age 15-49 who heard or saw a family planning message on various media and percentage who discussed the practice of family planning with a health worker or professional during the past six months, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| Background characteristic | Radio | Television | Newspaper/ magazine | None of these three media sources | Percent who discussed the practice of FP with a health professional | Number of men |
| Age |  |  |  |  |  |  |
| 15-19 | 45.2 | 17.3 | 23.9 | 45.8 | 2.3 | 1,323 |
| 20-24 | 56.8 | 24.9 | 35.3 | 32.2 | 4.7 | 886 |
| 25-29 | 68.4 | 30.4 | 46.5 | 23.8 | 11.1 | 624 |
| 30-34 | 67.9 | 34.7 | 41.1 | 25.6 | 12.3 | 431 |
| 35-39 | 65.8 | 28.0 | 39.6 | 24.6 | 13.9 | 367 |
| 40-44 | 70.8 | 31.9 | 38.7 | 23.4 | 14.8 | 269 |
| 45-49 | 72.3 | 31.3 | 37.5 | 24.6 | 10.0 | 256 |
| Residence |  |  |  |  |  |  |
| Urban | 62.0 | 38.3 | 47.6 | 25.6 | 11.3 | 1,181 |
| Rural | 57.4 | 20.3 | 29.6 | 35.8 | 6.0 | 2,975 |
| Region |  |  |  |  |  |  |
| Hhohho | 58.5 | 26.9 | 37.6 | 32.2 | 7.8 | 1,099 |
| Manzini | 62.5 | 31.9 | 42.6 | 27.0 | 7.3 | 1,349 |
| Shiselweni | 54.3 | 17.0 | 24.4 | 39.7 | 6.2 | 843 |
| Lubombo | 57.1 | 21.7 | 28.8 | 36.2 | 8.8 | 865 |
| Education |  |  |  |  |  |  |
| No education | 51.7 | 9.8 | 6.0 | 46.5 | 6.8 | 316 |
| Lower primary | 52.3 | 9.4 | 8.3 | 45.4 | 4.1 | 470 |
| Higher primary | 51.0 | 14.0 | 22.3 | 42.7 | 5.1 | 980 |
| Secondary | 60.1 | 25.0 | 37.3 | 29.6 | 6.6 | 1,191 |
| High School | 68.6 | 40.8 | 55.7 | 19.9 | 9.5 | 852 |
| Tertiary | 65.9 | 57.6 | 71.2 | 18.7 | 17.4 | 347 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 49.6 | 4.5 | 14.0 | 46.2 | 4.8 | 601 |
| Second | 54.0 | 11.2 | 26.0 | 40.3 | 3.2 | 665 |
| Middle | 59.9 | 15.9 | 29.8 | 33.9 | 5.4 | 856 |
| Fourth | 61.7 | 29.3 | 36.1 | 29.9 | 8.9 | 953 |
| Highest | 62.9 | 49.9 | 54.2 | 22.8 | 12.1 | 1,081 |
| Total 15-49 | 58.7 | 25.4 | 34.7 | 32.9 | 7.5 | 4,156 |

### 5.16 Contact of Nonusers with Family Planning Providers

Given the importance of family planning services to the improvement of mothers' and children's health, it is important to optimize every opportunity to meet a woman's family planning needs. In reality, however, health care providers often miss these opportunities. Information on missed opportunities was gathered by asking women if they had visited a health facility in the 12 months preceding the survey. Those who visited a health facility were asked whether anyone at the facility had discussed family planning with them during any of their visits. Women were also asked whether they had been visited by a RHM/CBD who talked with them about family planning in the 12 months preceding the survey.

The results of these questions for nonusers of contraception at the time of the survey are presented in Table 5.18. Only 7 percent of nonusers reported being visited by fieldworkers who discussed family planning issues. While 41 percent of nonusers visited a health facility during the 12 months preceding the survey, the majority of these women ( 30 percent) did not discuss family planning with any health care provider. In total, 84 percent of the women discussed family planning with neither a RHM/CBD nor a health professional at a health facility.


### 5.17 Husband's Knowledge of His Wife's Use Of Contraception

Concealing contraceptive use is an indication of absence of communication or disagreement on use of family planning. To shed light on the extent of communication on the use of contraception among married couples, married women who were using contraception at the time of the survey were asked whether their husband knew of their use. The majority of users ( 88 percent) reported that their husband or partner knows about their use of contraception (Table 5.19). There are small variations in the husband's awareness of contraceptive use by his spouse by background characteristics.

Women in urban areas and Manzini are more likely than other women to say that their husband is aware of their family planning status. The husband's knowledge of his wife's contraceptive use is directly related to the woman's education and somewhat to the woman's wealth status. For example, 84 percent of women with no education say that their husband/partner is aware that they use a contraceptive method compared with 94 percent of women with tertiary education.

| Table 5.19 Husband/partner's knowledge of women's use of contraception |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Among currently married women age 15-49 who are using a method, percent distribution by whether they report that their husbands/partners know about their use, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |
| Husband/partner's knowledge of respondent's use of contraception |  |  |  |  |  |
| Background characteristic | Knows ${ }^{1}$ | Does not know | Unsure whether knows/ missing | Total | Number of women |
| Age |  |  |  |  |  |
| 15-19 | (87.3) | (10.3) | (2.5) | 100.0 | 38 |
| 20-24 | 91.9 | 6.2 | 1.9 | 100.0 | 160 |
| 25-29 | 87.5 | 7.5 | 5.0 | 100.0 | 208 |
| 30-34 | 88.7 | 8.8 | 2.4 | 100.0 | 246 |
| 35-39 | 87.1 | 8.5 | 4.4 | 100.0 | 187 |
| 40-44 | 82.0 | 14.1 | 4.0 | 100.0 | 123 |
| 45-49 | 87.3 | 9.3 | 3.3 | 100.0 | 82 |
| Residence |  |  |  |  |  |
| Urban | 91.5 | 5.7 | 2.8 | 100.0 | 315 |
| Rural | 86.1 | 10.1 | 3.7 | 100.0 | 729 |
| Region |  |  |  |  |  |
| Hhohho | 85.5 | 9.3 | 5.1 | 100.0 | 322 |
| Manzini | 91.0 | 6.9 | 2.1 | 100.0 | 341 |
| Shiselweni | 86.3 | 10.5 | 3.3 | 100.0 | 165 |
| Lubombo | 87.0 | 9.8 | 3.2 | 100.0 | 215 |
| Education |  |  |  |  |  |
| No education | 83.7 | 12.7 | 3.6 | 100.0 | 71 |
| Lower primary | 85.2 | 12.0 | 2.7 | 100.0 | 64 |
| Higher primary | 84.7 | 10.6 | 4.6 | 100.0 | 245 |
| Secondary | 86.7 | 9.5 | 3.8 | 100.0 | 336 |
| High school | 91.2 | 7.1 | 1.7 | 100.0 | 182 |
| Tertiary | 94.1 | 2.8 | 3.1 | 100.0 | 145 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 83.6 | 13.3 | 3.1 | 100.0 | 131 |
| Second | 83.3 | 14.4 | 2.4 | 100.0 | 158 |
| Middle | 80.5 | 11.4 | 8.1 | 100.0 | 205 |
| Fourth | 91.2 | 6.9 | 1.9 | 100.0 | 215 |
| Highest | 93.7 | 4.0 | 2.3 | 100.0 | 334 |
| Total | 87.7 | 8.8 | 3.5 | 100.0 | 1,044 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. ${ }^{1}$ Includes women who report use of male sterilisation, male condoms or withdrawal |  |  |  |  |  |

### 5.18 Male Attitudes about Contraceptive Use

The 2006-07 SDHS assessed men's attitudes toward contraception by asking male respondents whether they agreed or disagreed with three statements about family planning use: 1) contraception is women's business and a man should not have to worry about it; 2 ) women who use contraception may become promiscuous; and 3) a woman is the one who gets pregnant so she should be the one to get sterilized. Results are shown in Table 5.20.

Overall, 12 percent of men say that contraception is a woman's issue. There are small variations to this statement according to the man's age and marital status. However, across regions, men in Lubombo are the most likely to agree with this statement (18 percent compared with 11 percent or less). The likelihood of men agreeing with this statement is inversely related to their education and wealth
status. For instance, 24 percent of men with no education believe that contraception is a woman's business compared with 3 percent of men with tertiary education.

More than six in ten men believe that a woman who uses contraception may become promiscuous. This sentiment varies across subgroups of men. Urban men and men who live in Lubombo are less likely to share this viewpoint. The relationship between men's education and wealth status and their likelihood of agreeing that a woman who uses contraception may become promiscuous is unclear. However, men with the highest education and men in the highest wealth quintile are least likely to disagree with this statement (47 percent and 57 percent, respectively).

| Table 5.20 Male attitudes about the use of contraception |  |  |  |
| :---: | :---: | :---: | :---: |
| Among men age 15-49, percentage who believe that contraception is a woman's business and percentage who believe that a woman using contraception may become promiscuous according to background characteristics, Swaziland 2006-07 |  |  |  |
| Background characteristic | Believe contraception is a woman's business | Believe a woman using contraception may become promiscuous | Number of men |
| Age |  |  |  |
| 15-19 | 14.3 | 64.4 | 1,323 |
| 20-24 | 11.0 | 67.3 | 886 |
| 25-29 | 9.8 | 66.3 | 624 |
| 30-34 | 11.5 | 63.6 | 431 |
| 35-39 | 10.7 | 54.1 | 367 |
| 40-44 | 13.5 | 54.8 | 269 |
| 45-49 | 14.3 | 53.6 | 256 |
| Marital status |  |  |  |
| Never married | 11.9 | 65.6 | 2,734 |
| Married or living together | 12.1 | 56.9 | 1,219 |
| Divorced/separated/widowed | 16.9 | 65.6 | 203 |
| Residence |  |  |  |
| Urban | 8.8 | 58.1 | 1,181 |
| Rural | 13.6 | 65.0 | 2,975 |
| Region |  |  |  |
| Hhohho | 10.6 | 64.0 | 1,099 |
| Manzini | 11.1 | 63.8 | 1,349 |
| Shiselweni | 10.0 | 62.7 | 843 |
| Lubombo | 18.4 | 60.9 | 865 |
| Education |  |  |  |
| No education | 23.8 | 63.0 | 316 |
| Lower primary | 22.9 | 59.7 | 470 |
| Higher primary | 16.6 | 65.7 | 980 |
| Secondary | 9.2 | 66.4 | 1,191 |
| High School | 5.2 | 63.7 | 852 |
| Tertiary | 2.6 | 46.7 | 347 |
| Wealth quintile |  |  |  |
| Lowest | 22.2 | 62.1 | 601 |
| Second | 14.2 | 64.0 | 665 |
| Middle | 10.8 | 65.3 | 856 |
| Fourth | 11.0 | 67.9 | 953 |
| Highest | 7.8 | 56.9 | 1,081 |
| Total | 12.2 | 63.0 | 4,156 |

## OTHER PROXIMATE DETERMINANTS OF FERTILITY

## Sri Poedjastoeti

This chapter addresses the principal factors, other than contraception, which affect a woman's risk of becoming pregnant. These factors include marriage, polygyny, sexual activity, postpartum amenorrhoea, abstinence from sexual activity, and onset of menopause. Direct measures of the beginning of exposure to pregnancy and the level of exposure are also measured in this chapter.

### 6.1 Current Marital Status

Marriage is a primary indication of the regular exposure of women to the risk of pregnancy and therefore is important for the understanding of fertility. Populations in which age at first marriage is low tend to have early childbearing and high fertility.

Table 6.1.1 presents the percent distribution of women by marital status, according to age. The term "married" refers to legal or formal marriage, while "living together" designates an informal union in which a man and a woman live together, even if a formal civil, religious, or traditional ceremony has not occurred. In later tables that do not list "living together" as a separate category, these women are included in the "currently married" group. Respondents who are currently married, widowed, divorced, or separated are referred to as "ever married."

| Table 6.1.1 Current marital status: Women and men 15-49 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men age 15-49 by current marital status, according to age, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |
|  | Marital status |  |  |  |  |  |  | Percentage of respondents currently in union | Number of respondents |
| Age | Never married | Married | Living together | Divorced | Separated | Widowed | Total |  |  |
| WOMEN |  |  |  |  |  |  |  |  |  |
| 15-19 | 92.7 | 3.5 | 3.4 | 0.0 | 0.3 | 0.0 | 100.0 | 6.9 | 1,274 |
| 20-24 | 65.6 | 19.7 | 13.1 | 0.0 | 1.3 | 0.3 | 100.0 | 32.8 | 1,046 |
| 25-29 | 40.8 | 40.4 | 12.9 | 0.0 | 3.7 | 2.2 | 100.0 | 53.3 | 729 |
| 30-34 | 26.4 | 49.6 | 11.9 | 0.7 | 4.0 | 7.4 | 100.0 | 61.5 | 616 |
| 35-39 | 14.3 | 57.1 | 9.4 | 1.1 | 5.1 | 13.0 | 100.0 | 66.5 | 503 |
| 40-44 | 12.5 | 56.3 | 10.2 | 1.3 | 4.7 | 14.9 | 100.0 | 66.6 | 438 |
| 45-49 | 8.7 | 53.6 | 8.6 | 1.5 | 6.2 | 21.4 | 100.0 | 62.2 | 383 |
| Total 15-49 | 49.9 | 31.9 | 9.5 | 0.4 | 2.8 | 5.6 | 100.0 | 41.3 | 4,987 |
| MEN |  |  |  |  |  |  |  |  |  |
| 15-19 | 99.8 | 0.0 | 0.1 | 0.0 | 0.1 | 0.0 | 100.0 | 0.1 | 1,323 |
| 20-24 | 91.1 | 4.1 | 3.4 | 0.3 | 1.1 | 0.0 | 100.0 | 7.5 | 886 |
| 25-29 | 58.9 | 22.6 | 13.2 | 1.0 | 3.5 | 0.7 | 100.0 | 35.9 | 624 |
| 30-34 | 32.8 | 47.6 | 11.5 | 0.6 | 6.2 | 1.3 | 100.0 | 59.1 | 431 |
| 35-39 | 19.4 | 58.9 | 10.1 | 1.4 | 5.0 | 5.3 | 100.0 | 69.0 | 367 |
| 40-44 | 6.7 | 68.9 | 9.6 | 2.7 | 6.0 | 6.0 | 100.0 | 78.5 | 269 |
| 45-49 | 3.1 | 72.4 | 8.9 | 2.1 | 8.4 | 5.1 | 100.0 | 81.3 | 256 |
| Total 15-49 | 65.8 | 23.3 | 6.0 | 0.7 | 2.8 | 1.4 | 100.0 | 29.3 | 4,156 |

Half of women of childbearing age have never been married; 41 percent are either married or living together with a man; and the remaining 9 percent are either divorced, separated, or widowed. Nine percent of women age 45-49 have never been married, indicating that marriage is not as universal in Swaziland as in most African countries. Two in three men age 15-49 have never been married; three in ten men are currently married or living with a partner; and only 5 percent are
separated, divorced, or widowed. Compared with women, a greater proportion of men have never been married ( 16 percentage points more), while a smaller proportion are formerly married.

Table 6.1.2 presents the percent distribution of women and men age 50 and older by marital status, according to age. Six percent of women age 50 and older and 1 percent of men age 50 and older have never been married. In this age group, men are much more likely than women to be in a union. While four in ten women are either married or living together, the corresponding proportion for men is as many as eight in ten. On the other hand, women are much more likely than men to be widowed (49 percent compared with 13 percent).

| Table 6.1.2 Current marital status: Women and men age 50+ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men age 50+ by current marital status, according to age, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |
|  | Marital status |  |  |  |  |  |  | Percentage of respondents currently in union | Number of respondents |
| Age | Never married | Married | Living together | Divorced | Separated | Widowed | Total |  |  |
| WOMEN AGE 50+ |  |  |  |  |  |  |  |  |  |
| 50-54 | 8.7 | 52.2 | 6.4 | 2.0 | 3.4 | 27.3 | 100.0 | 58.6 | 164 |
| 55-59 | 7.9 | 47.3 | 3.8 | 0.0 | 3.3 | 37.7 | 100.0 | 51.1 | 112 |
| 60+ | 4.3 | 25.6 | 3.2 | 1.1 | 3.9 | 62.0 | 100.0 | 28.8 | 392 |
| Total 50+ | 5.9 | 35.8 | 4.1 | 1.1 | 3.7 | 49.4 | 100.0 | 39.9 | 669 |
| MEN AGE 50+ |  |  |  |  |  |  |  |  |  |
| 50-54 | 1.9 | 77.3 | 9.1 | 0.0 | 5.2 | 6.6 | 100.0 | 86.3 | 116 |
| 55-59 | 1.6 | 76.8 | 5.5 | 0.4 | 5.7 | 10.1 | 100.0 | 82.3 | 80 |
| 60+ | 0.9 | 72.7 | 3.1 | 0.8 | 5.7 | 16.9 | 100.0 | 75.8 | 249 |
| Total 50+ | 1.3 | 74.6 | 5.1 | 0.5 | 5.5 | 13.0 | 100.0 | 79.7 | 444 |

### 6.2 Polygyny

Polygyny (having more than one wife) is common in Africa and has implications for frequency of sexual activity and fertility. Polygyny was measured by asking all currently married women whether their husbands or partners had other wives, and if so, how many. The extent of polygyny was measured by asking married women the question, "Besides yourself, does your husband/partner have any other wives or does he live with other women as if married?" For currently married men, the question was, "Do you have more than one wife or do you have more than one woman with whom you are living as if married?" If more than one, he was asked, "In total, how many wives do you have or other partners do you live with now as if married?" Table 6.2 shows the distribution of the women by the number of co-wives and the distribution of the men by the number of wives, according to background characteristics.

Two in three women reported having no co-wife, 18 percent of currently married women live in polygynous unions (having one or more co-wives), and 16 percent of women gave no response on polygyny status. The large proportion of women with information missing on whether they have cowives hinders the analysis somewhat. Older women are more likely to be in polygynous unions. Polygyny is more prevalent in rural than in urban areas. Analysis of regional distribution shows substantial variation, with Lubombo having the highest proportion of women in polygynous marriages ( 23 percent) and Manzini the lowest ( 15 percent). Women with no or low education and those who are in the lower wealth quintiles are more likely to live in polygynous marriages.

Data for currently married men show that 5 percent of men report having more than one wife. The pattern for men remains the same as that of women, reflecting similar regional and socioeconomic status differences.

Table 6.2 Polygyny: Women and men age 15-49
Percent distribution of currently married women age 15-49 by number of co-wives, and percent distribution of currently married men age 15-49 by number of wives, according to background characteristics, Swaziland 2006-07

| Background characteristic | Women |  |  |  |  |  | Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of co-wives |  |  |  | Total | Number of women | Number of wives |  |  | Total | Number of men |
|  | 0 | 1 | 2+ | Missing |  |  | 1 | $2+$ | Missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 72.1 | 8.8 | 3.2 | 15.9 | 100.0 | 88 | * | * | * | 100.0 | 2 |
| 20-24 | 73.2 | 7.5 | 2.4 | 16.8 | 100.0 | 343 | 95.5 | 3.0 | 1.5 | 100.0 | 66 |
| 25-29 | 66.9 | 10.2 | 2.9 | 20.0 | 100.0 | 388 | 98.1 | 1.9 | 0.0 | 100.0 | 224 |
| 30-34 | 68.1 | 10.8 | 4.8 | 16.2 | 100.0 | 379 | 95.6 | 4.0 | 0.5 | 100.0 | 255 |
| 35-39 | 59.7 | 15.8 | 6.0 | 18.5 | 100.0 | 334 | 92.3 | 6.9 | 0.8 | 100.0 | 253 |
| 40-44 | 63.2 | 19.2 | 6.3 | 11.4 | 100.0 | 291 | 92.5 | 6.1 | 1.4 | 100.0 | 211 |
| 45-49 | 60.8 | 22.8 | 9.2 | 7.2 | 100.0 | 238 | 91.6 | 8.4 | 0.0 | 100.0 | 208 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 71.2 | 7.7 | 2.8 | 18.2 | 100.0 | 542 | 95.9 | 3.3 | 0.8 | 100.0 | 490 |
| Rural | 64.1 | 15.5 | 5.6 | 14.8 | 100.0 | 1,520 | 93.0 | 6.6 | 0.4 | 100.0 | 729 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 68.4 | 13.6 | 4.7 | 13.3 | 100.0 | 600 | 93.0 | 6.4 | 0.6 | 100.0 | 389 |
| Manzini | 69.4 | 11.7 | 3.5 | 15.4 | 100.0 | 650 | 96.4 | 2.9 | 0.8 | 100.0 | 368 |
| Shiselweni | 70.9 | 13.1 | 5.6 | 10.4 | 100.0 | 363 | 95.8 | 3.3 | 0.9 | 100.0 | 175 |
| Lubombo | 53.9 | 16.0 | 6.6 | 23.6 | 100.0 | 449 | 91.9 | 8.0 | 0.1 | 100.0 | 287 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 62.1 | 16.8 | 5.0 | 16.1 | 100.0 | 247 | 90.2 | 9.8 | 0.0 | 100.0 | 156 |
| Lower primary | 61.1 | 13.4 | 6.8 | 18.7 | 100.0 | 176 | 92.5 | 7.2 | 0.3 | 100.0 | 131 |
| Higher primary | 62.8 | 19.0 | 4.7 | 13.5 | 100.0 | 538 | 92.1 | 7.5 | 0.4 | 100.0 | 227 |
| Secondary | 63.8 | 11.8 | 6.8 | 17.6 | 100.0 | 600 | 93.1 | 6.3 | 0.6 | 100.0 | 257 |
| High school | 72.6 | 9.8 | 1.7 | 15.9 | 100.0 | 304 | 96.9 | 1.7 | 1.3 | 100.0 | 241 |
| Tertiary | 80.7 | 4.5 | 2.8 | 12.0 | 100.0 | 197 | 98.5 | 1.0 | 0.5 | 100.0 | 206 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 61.8 | 18.1 | 3.2 | 16.9 | 100.0 | 353 | 91.1 | 8.4 | 0.6 | 100.0 | 158 |
| Second | 60.0 | 15.5 | 6.0 | 18.5 | 100.0 | 369 | 92.4 | 6.9 | 0.7 | 100.0 | 163 |
| Middle | 66.1 | 11.7 | 8.8 | 13.5 | 100.0 | 379 | 91.2 | 8.2 | 0.6 | 100.0 | 189 |
| Fourth | 64.9 | 14.9 | 5.2 | 15.0 | 100.0 | 424 | 96.6 | 3.4 | 0.0 | 100.0 | 268 |
| Highest | 73.7 | 9.0 | 2.3 | 15.0 | 100.0 | 537 | 95.7 | 3.4 | 0.9 | 100.0 | 440 |
| Total | 66.0 | 13.4 | 4.9 | 15.7 | 100.0 | 2,062 | 94.1 | 5.3 | 0.6 | 100.0 | 1,219 |

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

Data for currently married women age 50 and over and men age 50 and over are shown in Tables 6.3. Data in this table show that older women are more likely than younger women to be in a polygynous union ( 36 percent among women age 50 and over compared with 18 percent for women age 15-49). The corresponding figures for men are 19 percent and 5 percent, respectively. The differentials across subgroups remain the same as that of women and men 15-49, reflecting similar regional and educational differences.

| Table 6.3 Number of co-wives: Women and men age 50+ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of currently married women age 50+ by number of co-wives and percent distribution of currently married men age 50+ by number of wives, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |
| Women |  |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Number of co-wives |  |  |  | Total | Number of women 50+ |  |  | Men |  |  |
|  |  |  |  |  | Number of wives |  | Missing | Total | Number of men$50+$ |
|  | 0 | 1 | $2+$ | Missing |  |  |  |  |  | 1 | $2+$ |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 50-54 | 51.8 | 28.0 | 12.4 | 7.8 |  | 100.0 | 96 | 83.5 | 15.5 | 0.9 | 100.0 | 100 |
| 55-59 | 64.4 | 16.0 | 9.4 | 10.2 | 100.0 | 57 | 79.3 | 19.1 | 1.6 | 100.0 | 66 |
| $60+$ | 56.6 | 22.3 | 15.8 | 5.4 | 100.0 | 113 | 78.2 | 20.3 | 1.6 | 100.0 | 188 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 61.4 | 9.0 | 8.8 | 20.8 | 100.0 | 22 | 83.7 | 15.8 | 0.4 | 100.0 | 57 |
| Rural | 55.4 | 25.7 | 12.9 | 6.1 | 100.0 | 212 | 78.1 | 20.1 | 1.8 | 100.0 | 257 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 59.2 | 14.4 | 20.5 | 5.9 | 100.0 | 62 | 78.1 | 21.9 | 0.0 | 100.0 | 91 |
| Manzini | 58.2 | 25.4 | 8.0 | 8.4 | 100.0 | 72 | 81.0 | 16.8 | 2.2 | 100.0 | 88 |
| Shiselweni | 53.6 | 35.4 | 4.0 | 7.0 | 100.0 | 61 | 77.7 | 19.5 | 2.8 | 100.0 | 72 |
| Lubombo | 50.2 | 19.6 | 21.4 | 8.9 | 100.0 | 38 | 79.7 | 18.7 | 1.6 | 100.0 | 62 |
| Education level |  |  |  |  |  |  |  |  |  |  |  |
| No education | (58.3) | (19.3) | (20.8) | (1.6) | 100.0 | 37 | 81.5 | 18.0 | 0.5 | 100.0 | 51 |
| Lower primary | * | * | * | * | 100.0 | 18 | (74.8) | (25.2) | (0.0) | 100.0 | 27 |
| Higher primary | 55.8 | 29.4 | 13.0 | 1.8 | 100.0 | 70 | 75.6 | 23.3 | 1.1 | 100.0 | 89 |
| Secondary | 57.1 | 21.1 | 11.2 | 10.5 | 100.0 | 83 | 79.6 | 19.7 | 0.8 | 100.0 | 120 |
| High school | 58.0 | 23.0 | 10.8 | 8.3 | 100.0 | 52 | 89.2 | 7.1 | 3.7 | 100.0 | 52 |
| Tertiary | * | * | * | * | 100.0 | 7 | * | * | * | 100.0 | 14 |
| Total 50+ | 56.5 | 23.0 | 13.2 | 7.3 | 100.0 | 267 | 79.9 | 18.7 | 1.4 | 100.0 | 354 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

### 6.3 Age at First Marriage

Marriage is generally associated with fertility because it is correlated with exposure to risk of conception. The duration of exposure to the risk of pregnancy depends primarily on the age at which women first marry. Women who marry earlier, on average, have their first child earlier and give birth to more children, contributing to higher fertility rates.

Marriage occurs remarkably late in Swaziland. Only 15 percent of women age 25-49 marry before age 18 and 26 percent have married by age 20 (Table 6.4). The proportion of women marrying by each age appears to have declined over time. Among women age 45-49, 31 percent were married by age 20 compared with only 13 percent of women age 20-24. The median age at marriage among women increases from 23.3 years among women age 45-49 to 25.6 years among women age 30-34.

The lower panel of Table 6.4 shows the distribution among men. Only 7 percent of men age $25-49$ were married before their $20^{\text {th }}$ birthday, and 32 percent were married before age 25 . The median age at marriage among men age 45-49 is 26.2 years, more than two years earlier than men age 30-34.

| Table 6.4 Age at first marriage: Women and men age 15-49 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men age 15-49 who were first married by specific exact ages and median age at first marriage, according to current age, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  | Percentage first married by exact age: |  |  |  |  | Percentage never married | Number | Median age at first marriage |
| Current age | 15 | 18 | 20 | 22 | 25 |  |  |  |
| WOMEN |  |  |  |  |  |  |  |  |
| 15-19 | 0.4 | na | na | na | na | 92.7 | 1,274 | a |
| 20-24 | 0.7 | 5.0 | 13.0 | na | na | 65.6 | 1,046 | a |
| 25-29 | 1.3 | 8.4 | 16.7 | 25.8 | 38.4 | 40.8 | 729 | a |
| 30-34 | 3.1 | 13.9 | 25.4 | 34.5 | 47.9 | 26.4 | 616 | 25.6 |
| 35-39 | 2.6 | 18.5 | 30.7 | 40.9 | 53.2 | 14.3 | 503 | 24.3 |
| 40-44 | 4.8 | 19.5 | 34.4 | 43.1 | 56.3 | 12.5 | 438 | 23.7 |
| 45-49 | 4.7 | 19.2 | 31.0 | 44.9 | 56.8 | 8.7 | 383 | 23.3 |
| 20-49 | 2.4 | 12.1 | 22.5 | na | na | 35.2 | 3,713 | a |
| 25-49 | 3.0 | 14.9 | 26.3 | 36.2 | 48.9 | 23.2 | 2,667 | a |
| MEN |  |  |  |  |  |  |  |  |
| 15-19 | 0.0 | na | na | na | na | 99.8 | 1,323 | a |
| 20-24 | 0.1 | 0.9 | 2.6 | na | na | 91.1 | 886 | a |
| 25-29 | 0.1 | 1.1 | 5.0 | 10.9 | 26.2 | 58.9 | 624 | a |
| 30-34 | 0.4 | 1.2 | 3.3 | 10.8 | 28.4 | 32.8 | 431 | 28.8 |
| 35-39 | 0.8 | 3.0 | 10.1 | 18.6 | 32.8 | 19.4 | 367 | 28.2 |
| 40-44 | 0.0 | 5.5 | 11.0 | 23.1 | 42.3 | 6.7 | 269 | 26.7 |
| 45-49 | 0.9 | 3.8 | 7.9 | 20.8 | 42.2 | 3.1 | 256 | 26.2 |
| 20-49 | 0.3 | 2.0 | 5.5 | na | na | 49.9 | 2,833 | a |
| 25-49 | 0.4 | 2.5 | 6.8 | 15.3 | 32.3 | 31.1 | 1,947 | a |

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
na $=$ Not applicable due to censoring
a $=$ Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group

Table 6.5 shows the age at first marriage for women and men age 50 and older. The increase in age at marriage is again reflected in this table. Older adults marry at an earlier age than their younger counterparts. For example, 65 percent of women age 50 and over were married before age 25 , compared with 49 percent of women age 25-49.

| Percentage of women and men age 50+ who were first married by specific exact ages and median age at first marriage, according to current age, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage first married by exact age: |  |  |  |  | Percentage never |  | Median age at first |
| Age | 15 | 18 | 20 | 22 | 25 | married | Number | marriage |
| WOMEN |  |  |  |  |  |  |  |  |
| 50-54 | 8.6 | 21.3 | 33.2 | 44.7 | 60.8 | 8.7 | 164 | 22.6 |
| 55-59 | 1.8 | 13.8 | 22.5 | 35.8 | 61.3 | 7.9 | 112 | 23.7 |
| 60+ | 6.3 | 24.5 | 37.5 | 52.6 | 68.4 | 4.3 | 392 | 21.6 |
| Total 50+ | 6.1 | 21.9 | 33.9 | 47.8 | 65.4 | 5.9 | 669 | 22.3 |
| MEN |  |  |  |  |  |  |  |  |
| 50-54 | 0.0 | 1.1 | 4.3 | 13.5 | 37.4 | 1.9 | 116 | 28.0 |
| 55-59 | 1.4 | 1.4 | 6.4 | 11.2 | 30.7 | 1.6 | 80 | 27.1 |
| 60+ | 0.4 | 3.1 | 6.4 | 13.9 | 29.5 | 0.9 | 249 | 28.8 |
| Total 50+ | 0.5 | 2.3 | 5.8 | 13.3 | 31.8 | 1.3 | 444 | 28.3 |

Table 6.6 further examines the median age at first marriage for women and men age 30-49, by background characteristics. Urban women marry more than five years later than their rural counterparts. The variation by region is not large; women in Lubombo enter into marriage earlier than women in other regions. Large variations exist in the median age at first marriage by the woman's education and wealth index. Women who attended high school marry more than four years later than women with primary or less education, and women in the highest wealth quintile marry more than four years later than women in the lowest quintile.

In general, men age 30-49 marry 3.4 years later than women of the same age group. The 2006-07 SDHS shows little difference in the median age between men in the rural and urban areas (less than two years). As in the case of women, men in Lubombo marry earlier than men in other regions ( 26.3 years compared with 27.4 years or older). Men who are relatively poor or have little education marry earlier than other men. For instance, men with tertiary education marry almost five years later than men with no education.

| Table 6.6 Median age at first marriage |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Median age at first marriage among women and men by five-year age groups and age |  |  |  |  |  |  |
| 30-49 according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |

### 6.4 Age at First Sexual Intercourse

Although age at marriage is often used as a proxy measure for the beginning of exposure to the risk of pregnancy, some women and men engage in sexual activity before marriage. The 2006-07 SDHS collected information on the timing of the first sexual intercourse for both men and women. The percentage of women and men who had had sexual intercourse by exact ages is given in Table 6.7.

Eleven percent of women age 25-49 had sex before age 15, while half had their first sex by their $18^{\text {th }}$ birthday. Older women are more likely than younger women to have had their first sexual encounter at an earlier age. This is reflected in the median age at first sex, which is more than 18 years for those under age 35 and less than 18 years for women age 35 and above.

The data for the men show a later age at first sex at all age groups, compared with women. Thirty-one percent of men age 20-49 had sex before age 18 , and 85 percent of men have had sex by age 25.

| Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had intercourse, and median age at first intercourse, according to current age, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | had first exact | ual int |  | Percentage who never had |  | Median age at first |
| Age | 15 | 18 | 20 | 22 | 25 | intercourse | Number | intercourse |
| WOMEN |  |  |  |  |  |  |  |  |
| 15-19 | 7.4 | na | na | na | na | 58.6 | 1,274 | a |
| 20-24 | 6.4 | 46.3 | 73.1 | na | na | 10.0 | 1,046 | 18.2 |
| 25-29 | 7.5 | 47.8 | 71.1 | 81.6 | 86.9 | 2.4 | 729 | 18.1 |
| 30-34 | 8.1 | 47.4 | 69.9 | 80.7 | 85.8 | 1.0 | 616 | 18.2 |
| 35-39 | 10.7 | 52.2 | 75.1 | 83.5 | 88.8 | 0.2 | 503 | 17.8 |
| 40-44 | 12.7 | 51.3 | 69.9 | 78.2 | 81.5 | 0.3 | 438 | 17.9 |
| 45-49 | 17.5 | 54.4 | 72.0 | 80.7 | 86.0 | 0.6 | 383 | 17.6 |
| 20-49 | 9.3 | 49.0 | 72.0 | 81.6 | 85.5 | 3.6 | 3,713 | 18.1 |
| 25-49 | 10.5 | 50.1 | 71.5 | na | na | 1.1 | 2,667 | 18.0 |
| 15-24 | 6.9 | na | na | na | na | 36.7 | 2,320 | 19.0 |
| MEN |  |  |  |  |  |  |  |  |
| 15-19 | 4.9 | na | na | na | na | 78.4 | 1,323 | a |
| 20-24 | 4.7 | 36.7 | 64.2 | na | na | 21.3 | 886 | 18.8 |
| 25-29 | 3.2 | 31.0 | 59.2 | 79.4 | 90.0 | 5.6 | 624 | 19.3 |
| 30-34 | 3.7 | 31.1 | 53.8 | 70.7 | 87.0 | 2.4 | 431 | 19.2 |
| 35-39 | 2.6 | 29.2 | 54.8 | 78.5 | 89.7 | 1.1 | 367 | 19.5 |
| 40-44 | 2.5 | 26.1 | 50.3 | 72.5 | 86.1 | 0.0 | 269 | 20.0 |
| 45-49 | 4.2 | 22.9 | 51.7 | 71.6 | 84.3 | 0.3 | 256 | 19.8 |
| 20-49 | 3.7 | 31.4 | 57.9 | 75.3 | 85.0 | 8.4 | 2,833 | 19.2 |
| 25-49 | 3.2 | 28.9 | 55.0 | na | na | 2.6 | 1,947 | 19.5 |
| 15-24 | 4.8 | na | na | na | na | 55.5 | 2,209 | a |
| na $=$ Not applicable due to censoring <br> $\mathrm{a}=$ Omitted because less than 50 percent of the respondents had intercourse for the first time before reaching the beginning of the age group |  |  |  |  |  |  |  |  |

Eight percent of women age 50 and over had sex before age 15 and almost half had their first sex by their $18^{\text {th }}$ birthday (Table 6.8). Among women age 50 and over, older women tend to have had their first sexual encounter at a later age than younger women. The median age at first sex for women age 60 and over is one year later than for women age $50-54$. The same pattern is observed among men; men age 60 and over had their first sex almost two years later than men age 50-54.

| Table 6.8 Age at first sexual intercourse: Women and men age 50+ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men age 50+ who had first sexual intercourse by specific exact ages, percentage who never had intercourse, and median age at first intercourse, according to current age, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  |  | age w | ad firs exact | ual int |  | Percentage who never had |  | Median age at first |
| Age | 15 | 18 | 20 | 22 | 25 | intercourse | Number | intercourse |
| WOMEN |  |  |  |  |  |  |  |  |
| 50-54 | 10.4 | 55.7 | 73.5 | 87.8 | 94.2 | 0.0 | 164 | 17.6 |
| 55-59 | 4.9 | 40.8 | 69.7 | 84.4 | 93.3 | 0.0 | 112 | 18.5 |
| 60+ | 8.6 | 43.4 | 59.7 | 80.4 | 88.2 | 0.6 | 392 | 18.6 |
| Total 50+ | 8.4 | 46.0 | 64.8 | 82.9 | 90.5 | 0.4 | 669 | 18.3 |
| MEN |  |  |  |  |  |  |  |  |
| 50-54 | 1.4 | 22.4 | 42.9 | 68.7 | 83.0 | 0.0 | 116 | 20.4 |
| 55-59 | 1.2 | 9.4 | 34.9 | 53.8 | 73.2 | 0.0 | 80 | 21.3 |
| 60+ | 0.5 | 12.0 | 28.5 | 49.7 | 67.6 | 0.0 | 249 | 22.1 |
| Total 50+ | 0.9 | 14.2 | 33.4 | 55.4 | 72.6 | 0.0 | 444 | 21.2 |

Table 6.9 shows the median age at first sex by background characteristics for women and men age 25-49 years. Women in the rural areas start sexual activity about one year earlier than their urban counterparts. There are no significant regional differences in the age at initiation of sexual intercourse, ranging from 17.6 years in Lubombo to 18.2 years in Hhohho and Manzini. Age at first sex increases with education and wealth status; women with high school education begin sexual activity at least two years later than those with no education and women in the lowest wealth quintiles start sexual activity at least one year earlier than those who are wealthy.

| Table 6.9 Median age at first intercourse |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Median age at first sexual intercourse among women and men age 25-49 by five-year age groups and age 25-49, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
| Background characteristic | Age |  |  |  |  |  | Women age | Men age |
|  | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 25-49 | 25-49 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 18.5 | 18.6 | 18.4 | 18.8 | 18.5 | 18.8 | 18.6 | 19.4 |
| Rural | 18.1 | 17.9 | 18.0 | 17.5 | 17.6 | 17.2 | 17.7 | 19.5 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 18.1 | 18.3 | 17.7 | 18.5 | 18.4 | 17.5 | 18.2 | 19.5 |
| Manzini | 18.6 | 18.4 | 18.5 | 17.8 | 18.2 | 17.5 | 18.2 | 19.4 |
| Shiselweni | 18.2 | 17.9 | 18.2 | 17.6 | 17.5 | 17.6 | 17.8 | 19.2 |
| Lubombo | 17.6 | 17.8 | 18.0 | 17.4 | 16.9 | 17.6 | 17.6 | 19.6 |
| Education |  |  |  |  |  |  |  |  |
| No education | 15.7 | 17.1 | 16.8 | 15.9 | 15.8 | 16.9 | 16.6 | 19.1 |
| Lower primary | 16.7 | 15.9 | 16.5 | 16.7 | 16.7 | 16.2 | 16.4 | 18.9 |
| Higher primary | 17.4 | 17.1 | 17.1 | 17.0 | 17.4 | 16.9 | 17.1 | 19.4 |
| Secondary | 18.1 | 17.9 | 18.0 | 17.7 | 18.4 | 18.1 | 18.0 | 19.2 |
| High school | 19.5 | 18.8 | 19.0 | 18.4 | 19.0 | 19.9 | 18.9 | 19.6 |
| Tertiary | a | 21.1 | 21.6 | 20.8 | 20.0 | 20.6 | 21.0 | 20.1 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 17.5 | 17.3 | 17.5 | 17.2 | 16.9 | 17.1 | 17.2 | 18.9 |
| Second | 17.5 | 17.7 | 17.2 | 17.6 | 16.9 | 17.4 | 17.5 | 19.1 |
| Middle | 18.3 | 17.7 | 17.9 | 17.3 | 17.5 | 17.2 | 17.7 | 19.6 |
| Fourth | 18.5 | 18.4 | 18.1 | 17.4 | 18.5 | 16.7 | 18.0 | 19.6 |
| Highest | 18.7 | 18.8 | 18.9 | 19.0 | 18.7 | 18.9 | 18.9 | 19.7 |
| Total | 18.2 | 18.1 | 18.2 | 17.8 | 17.9 | 17.6 | 18.0 | 19.5 |
| $\mathrm{a}=$ Omitted because less than 50 percent of the women had intercourse for the first time before reaching the beginning of the age group |  |  |  |  |  |  |  |  |

The data for men show a different pattern than that for women, with almost no differences in the timing of first sexual activity between those in rural and urban areas and across regions. Like women, the median age at first sex among men increases with the level of education and wealth status.

### 6.5 ReCENT SexUAl Activity

In the absence of contraception, the chance of becoming pregnant is related to the frequency of sexual intercourse. Thus, the information on sexual activity can be used to refine measures of exposure to pregnancy. Women and men were asked how long ago their last sexual activity occurred. The responses to this question allow for an assessment of recent sexual activity (in the four weeks preceding the survey).

Tables 6.10 .1 and 6.10 .2 show the distribution of women and men, respectively, according to the timing of last sexual activity, by background characteristics. Eighteen percent of women age 1549 and 31 percent of men age 15-49 have never had sexual intercourse. About four in ten of the female and male respondents had a recent (within the last four weeks) sexual encounter, and 13 percent of women and 9 percent of men report that their last sexual encounter occurred more than one year before the survey.

As expected, recent sexual activity is less common among the youngest age group (15-19); 13 percent of women and 4 percent of men in this age group did not have sex. Recent sexual activity is more common among the currently married, with 74 percent of women and 83 percent of men having had sex in the four weeks before the survey. Male-female differences are greatest for those formerly married: the proportion of men who report a recent sexual encounter is about twice that of women (38 percent and 20 percent, respectively). Urban women and men are more likely than those in rural areas to have recent sexual activity.

Table 6.10.3 presents recent sexual activity among older adults. Male-female differences are reflected in all subgroups of population; men are much more likely than women to report having recent sexual intercourse. Among older adults, recent sexual activity is less common among the oldest age group ( 60 and over). However, this group shows the largest male-female differences. While 7 percent of women age 60 and over had sex in the last four weeks, the corresponding proportion among men is 47 percent.

## Table 6.10.1 Recent sexual activity: Women age 15-49

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics,
Swaziland 2006-07

| Background characteristic | Timing of last sexual intercourse |  |  |  | Never had sexual intercourse | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Within the past 4 weeks | Within 1 year $^{1}$ | One or more years | Missing |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 12.5 | 22.9 | 6.0 | 0.0 | 58.6 | 100.0 | 1,274 |
| 20-24 | 43.9 | 35.6 | 10.1 | 0.4 | 10.0 | 100.0 | 1,046 |
| 25-29 | 56.8 | 29.6 | 10.9 | 0.2 | 2.4 | 100.0 | 729 |
| 30-34 | 59.7 | 27.2 | 11.9 | 0.3 | 1.0 | 100.0 | 616 |
| 35-39 | 57.4 | 23.9 | 18.4 | 0.0 | 0.2 | 100.0 | 503 |
| 40-44 | 52.9 | 24.0 | 22.6 | 0.3 | 0.3 | 100.0 | 438 |
| 45-49 | 45.0 | 19.8 | 33.9 | 0.6 | 0.6 | 100.0 | 383 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 19.6 | 31.2 | 13.6 | 0.3 | 35.4 | 100.0 | 2,487 |
| Married or living together | 73.7 | 22.3 | 3.8 | 0.2 | 0.0 | 100.0 | 2,062 |
| Divorced/separated/widowed | 19.7 | 25.6 | 54.7 | 0.0 | 0.0 | 100.0 | 438 |
| Marital duration ${ }^{2}$ |  |  |  |  |  |  |  |
| 0-4 years | 77.2 | 22.0 | 0.6 | 0.2 | 0.0 | 100.0 | 416 |
| 5-9 years | 79.1 | 17.2 | 3.6 | 0.2 | 0.0 | 100.0 | 340 |
| 10-14 years | 71.8 | 26.4 | 1.8 | 0.0 | 0.0 | 100.0 | 251 |
| 15-19 years | 75.5 | 20.8 | 3.4 | 0.3 | 0.0 | 100.0 | 239 |
| 20-24 years | 62.8 | 26.4 | 10.8 | 0.0 | 0.0 | 100.0 | 200 |
| $25+$ years | 68.8 | 20.3 | 10.3 | 0.7 | 0.0 | 100.0 | 181 |
| Married more than once | 71.6 | 26.1 | 2.3 | 0.0 | 0.0 | 100.0 | 189 |
| Residence |  |  |  |  |  |  |  |
| Urban | 46.3 | 25.7 | 14.1 | 0.0 | 13.9 | 100.0 | 1,330 |
| Rural | 40.4 | 27.5 | 12.8 | 0.3 | 19.0 | 100.0 | 3,657 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 45.2 | 24.2 | 13.6 | 0.1 | 17.0 | 100.0 | 1,340 |
| Manzini | 40.0 | 28.0 | 14.3 | 0.2 | 17.5 | 100.0 | 1,647 |
| Shiselweni | 38.2 | 27.6 | 12.7 | 0.3 | 21.3 | 100.0 | 1,033 |
| Lubombo | 44.8 | 28.8 | 11.1 | 0.4 | 14.9 | 100.0 | 966 |
| Education |  |  |  |  |  |  |  |
| No education | 48.3 | 29.9 | 19.2 | 0.3 | 2.3 | 100.0 | 402 |
| Lower primary | 43.5 | 31.5 | 15.3 | 0.6 | 9.1 | 100.0 | 360 |
| Higher primary | 40.8 | 27.3 | 12.6 | 0.1 | 19.2 | 100.0 | 1,268 |
| Secondary | 37.7 | 26.4 | 11.5 | 0.1 | 24.2 | 100.0 | 1,693 |
| High school | 41.4 | 28.4 | 13.0 | 0.1 | 17.2 | 100.0 | 894 |
| Tertiary | 58.5 | 18.3 | 13.9 | 0.9 | 8.3 | 100.0 | 370 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 38.0 | 32.4 | 13.5 | 0.6 | 15.6 | 100.0 | 785 |
| Second | 41.9 | 28.1 | 14.4 | 0.0 | 15.6 | 100.0 | 862 |
| Middle | 40.6 | 28.7 | 12.8 | 0.0 | 17.9 | 100.0 | 968 |
| Fourth | 40.9 | 25.2 | 13.2 | 0.2 | 20.5 | 100.0 | 1,111 |
| Highest | 46.5 | 23.3 | 12.3 | 0.3 | 17.6 | 100.0 | 1,262 |
| Total 15-49 | 42.0 | 27.0 | 13.1 | 0.2 | 17.6 | 100.0 | 4,987 |

[^6]
## Table 6.10.2 Recent sexual activity: Men age 15-49

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Swaziland 2006-07

|  | Timing of last sexual intercourse |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

Note: Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Excludes men who had sexual intercourse within the last 4 weeks
${ }^{2}$ Excludes men who are not currently married

| Table 6.10.3 Recent sexual activity: Women and men age 50+ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men age 50+ by timing of last sexual intercourse, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |
| Background characteristic | Tim | gi of last s | xual intercour |  | Never had |  |  |
|  | Within the past 4 weeks | Within <br> 1 year ${ }^{1}$ | One or more years | Missing | sexual intercourse | Total | Number of adults 50+ |
| WOMEN |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 50-54 | 35.0 | 20.0 | 43.9 | 1.1 | 0.0 | 100.0 | 164 |
| 55-59 | 19.0 | 13.8 | 67.3 | 0.0 | 0.0 | 100.0 | 112 |
| 60+ | 7.4 | 4.7 | 86.6 | 0.6 | 0.6 | 100.0 | 392 |
| Residence |  |  |  |  |  |  |  |
| Urban | 16.4 | 10.4 | 72.3 | 0.9 | 0.0 | 100.0 | 69 |
| Rural | 16.4 | 9.0 | 73.5 | 0.7 | 0.5 | 100.0 | 519 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 16.2 | 4.8 | 78.5 | 0.5 | 0.0 | 100.0 | 148 |
| Manzini | 16.4 | 11.3 | 71.3 | 0.9 | 0.0 | 100.0 | 181 |
| Shiselweni | 14.3 | 8.6 | 76.4 | 0.0 | 0.7 | 100.0 | 164 |
| Lubombo | 20.3 | 12.6 | 63.9 | 1.9 | 1.3 | 100.0 | 95 |
| Education |  |  |  |  |  |  |  |
| No education | 10.6 | 10.4 | 78.1 | 1.0 | 0.0 | 100.0 | 277 |
| Lower primary | 10.1 | 11.6 | 78.0 | 0.4 | 0.0 | 100.0 | 151 |
| Higher primary | 22.9 | 6.6 | 69.0 | 0.6 | 0.8 | 100.0 | 149 |
| Secondary | 34.7 | 13.4 | 50.0 | 0.0 | 1.9 | 100.0 | 60 |
| High school + | (27.3) | (8.6) | (64.2) | (0.0) | (0.0) | 100.0 | 31 |
| Total 50+ | 16.1 | 10.0 | 72.9 | 0.6 | 0.4 | 100.0 | 669 |
|  |  |  | MEN |  |  |  |  |
| Age |  |  |  |  |  |  |  |
| 50-54 | 65.4 | 22.0 | 11.6 | 1.0 | 0.0 | 100.0 | 116 |
| 55-59 | 55.8 | 22.0 | 20.8 | 1.4 | 0.0 | 100.0 | 80 |
| 60+ | 46.5 | 18.2 | 34.9 | 0.3 | 0.0 | 100.0 | 249 |
| Residence |  |  |  |  |  |  |  |
| Urban | 67.1 | 23.8 | 9.0 | 0.0 | 0.0 | 100.0 | 63 |
| Rural | 49.7 | 20.1 | 29.6 | 0.6 | 0.0 | 100.0 | 327 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 53.7 | 21.9 | 23.4 | 1.0 | 0.0 | 100.0 | 114 |
| Manzini | 49.8 | 18.4 | 31.8 | 0.0 | 0.0 | 100.0 | 117 |
| Shiselweni | 49.9 | 24.3 | 25.8 | 0.0 | 0.0 | 100.0 | 85 |
| Lubombo | 57.9 | 18.3 | 22.7 | 1.2 | 0.0 | 100.0 | 74 |
| Education |  |  |  |  |  |  |  |
| No education | 39.8 | 23.8 | 35.9 | 0.5 | 0.0 | 100.0 | 171 |
| Lower primary | 57.0 | 18.8 | 24.2 | 0.0 | 0.0 | 100.0 | 80 |
| Higher primary | 59.8 | 17.1 | 23.2 | 0.0 | 0.0 | 100.0 | 85 |
| Secondary | 63.6 | 17.2 | 15.5 | 3.8 | 0.0 | 100.0 | 60 |
| High school + | (68.5) | (16.6) | (14.8) | (0.0) | (0.0) | 100.0 | 47 |
| Total 50+ | 53.1 | 19.9 | 26.3 | 0.7 | 0.0 | 100.0 | 444 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Excludes women and men who had sexual intercourse within the last 4 weeks

### 6.6 Postpartum Amenorrhoea, Abstinence, and Insusceptibility

Postpartum amenorrhoea refers to the interval between childbirth and the return of menstruation. The length and intensity of breastfeeding influence the duration of amenorrhoea, which offers protection from conception. Postpartum abstinence refers to the period between childbirth and the time when a woman resumes sexual activity. Delaying the resumption of sexual relations can also prolong protection. Women are considered to be insusceptible to pregnancy if they are not exposed to the risk of conception either because their menstrual period has not resumed since a birth or because they are abstaining from intercourse after childbirth.

Women who gave birth three years preceding the survey were asked about the duration of their periods of amenorrhoea and sexual abstinence following each birth. The results are presented in Table 6.11. Almost all women are insusceptible to pregnancy within the first two months following childbirth. After the second month, the contribution of abstinence gradually declines. At 10 to 11 months after birth, about half of all women are insusceptible, but only 19 percent are abstaining. The principal determinant of the length of the period of insusceptibility is postpartum amenorrhoea. The median duration of amenorrhoea is 6.9 months; of abstinence is 4.6 months; and of insusceptibility is 10.7 months.

| Table 6.11 Postpartum amenorrhoea, abstinence, and insusceptibility |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Swaziland 2006-07 |  |  |  |  |
| Months since birth | Percentage of births for which the mother is: |  |  | Number of births |
|  | Amenorrhoeic | Abstaining | Insusceptible ${ }^{1}$ |  |
| <2 | 65.5 | 93.7 | 96.8 | 67 |
| 2-3 | 61.2 | 75.7 | 88.8 | 97 |
| 4-5 | 57.9 | 50.9 | 76.4 | 113 |
| 6-7 | 47.7 | 32.3 | 63.3 | 129 |
| 8-9 | 48.7 | 17.9 | 52.8 | 84 |
| 10-11 | 38.4 | 18.8 | 49.4 | 113 |
| 12-13 | 37.2 | 24.8 | 49.8 | 110 |
| 14-15 | 30.9 | 10.0 | 36.4 | 107 |
| 16-17 | 25.2 | 9.3 | 31.4 | 86 |
| 18-19 | 32.0 | 10.6 | 38.2 | 85 |
| 20-21 | 17.2 | 7.3 | 22.9 | 73 |
| 22-23 | 23.9 | 9.6 | 29.6 | 110 |
| 24-25 | 18.0 | 7.5 | 24.3 | 88 |
| 26-27 | 14.6 | 6.1 | 17.8 | 101 |
| 28-29 | 22.8 | 4.0 | 24.5 | 95 |
| 30-31 | 10.3 | 6.3 | 14.6 | 87 |
| 32-33 | 14.4 | 3.7 | 18.1 | 87 |
| 34-35 | 19.7 | 2.1 | 19.7 | 92 |
| Total | 33.0 | 21.4 | 42.4 | 1,724 |
| Median | 6.9 | 4.6 | 10.7 | na |
| Mean | 12.1 | 8.1 | 15.4 | na |

[^7]Table 6.12 shows the median durations of postpartum amenorrhoea, abstinence, and insusceptibility by background characteristics of the respondents. Older women (age 30-49) have a longer median period of insusceptibility, mainly because of the longer duration of postpartum amenorrhoea ( 10.5 months compared with 5.6 months for women age 15-29). Women living in urban areas have a longer median duration of amenorrhoea and a longer period of insusceptibility. The period of insusceptibility varies considerably by region. The median duration in Manzini is almost double that of Lubombo ( 13.2 months and 7.6 months, respectively). The median duration of amenorrhoea has no clear relationship with the level of education and wealth status.

| Table 6.12 Median duration of amenorrhoea, postpartum abstinence, and |  |  |  |
| :---: | :---: | :---: | :---: |
| Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Swaziland 2006-07 |  |  |  |
| Background characteristic | Postpartum amenorrhoea | Postpartum abstinence | Postpartum insusceptibility ${ }^{1}$ |
| Mother's age |  |  |  |
| 15-29 | 5.6 | 4.6 | 9.9 |
| 30-49 | 10.5 | 4.6 | 12.3 |
| Residence |  |  |  |
| Urban | 8.7 | 4.1 | 12.1 |
| Rural | 6.6 | 4.8 | 10.1 |
| Region |  |  |  |
| Hhohho | 0.7 | 4.4 | 9.9 |
| Manzini | 7.4 | 3.9 | 13.2 |
| Shiselweni | 4.7 | 6.2 | 11.4 |
| Lubombo | 4.1 | 4.3 | 7.6 |
| Education |  |  |  |
| No education | 3.9 | 4.5 | 13.7 |
| Lower primary | 7.1 | 4.4 | 7.9 |
| Higher primary | 0.7 | 4.4 | 10.4 |
| Secondary | 6.8 | 5.1 | 9.6 |
| High school | 6.7 | 4.7 | 8.8 |
| Tertiary | 4.7 | 1.1 | 13.4 |
| Wealth quintile |  |  |  |
| Lowest | 3.9 | 4.9 | 11.1 |
| Second | 11.6 | 3.5 | 13.5 |
| Middle | 0.7 | 6.3 | 8.6 |
| Fourth | 7.1 | 5.1 | 9.3 |
| Highest | 4.9 | 3.7 | 13.2 |
| Total | 6.9 | 4.6 | 10.7 |
| Note: Medians are based on the status at the time of the survey (current status). <br> ${ }^{1}$ Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth |  |  |  |

### 6.7 Termination of Exposure to Pregnancy

While the onset of infecundity is difficult to determine for an individual woman, there are ways of estimating it for a given population. One indicator of infecundity is the onset of menopause. In the context of the available survey data, women are considered menopausal if they are neither pregnant nor postpartum amenorrhoeic, but have not had a menstrual period in the six months preceding the survey. The prevalence of menopause increases with age, typically from around age 30 .

Table 6.13 presents the indicator for women age 30-49, which ranges from 4 percent for women age $30-34$ to 58 percent for women age 48-49. Overall, 13 percent of women age 30-49 were reported to be menopausal.

Table 6.13 Menopause
Percentage of women age 30-49 who are menopausal, by age, Swaziland 2006-07

| Age | Percentage <br> menopausal $^{1}$ | Number of <br> women |
| :--- | :---: | :---: |
| $30-34$ | 4.1 | 616 |
| $35-39$ | 4.2 | 503 |
| $40-41$ | 7.3 | 183 |
| $42-43$ | 12.0 | 175 |
| $44-45$ | 21.2 | 160 |
| $46-47$ | 36.0 | 180 |
| $48-49$ | 57.8 | 122 |
|  | 12.9 | 1,939 |

${ }^{1}$ Percentage of all women who are not pregnant and not postpartum amenorrhoeic whose last menstrual period occurred six or more months preceding the survey

## Dudu Dlamini

The 2006-07 Swaziland DHS included several questions designed to ascertain women's fertility preferences. Women who were either not pregnant or unsure about their status were asked the question: "Would you like to have a (another) child or would you prefer not to have any (more) children?" A different question was posed for women who were pregnant at the time of the survey. Pregnant women were asked: "After the child you are expecting, would you like to have another child or would you prefer not to have any more children?" The women who indicated that they wanted another child were asked how long they would like to wait before the birth of the next child. Finally, women were asked the total number of children they would like to have, if they were to start childbearing afresh.

Given that men play a vital role in the realisation of reproductive goals, the 2006-07 SDHS also included questions that elicited information from men on fertility preferences.

The fertility preferences questions in the SDHS are hypothetical and, thus, respondents' answers have to be interpreted with some caution. Nevertheless, the data on fertility preferences have been shown to be a useful indicator of the direction that future fertility may take. In combination with data on contraceptive use, data on fertility preferences also allow estimation of the need for family planning, both for spacing and limiting births.

### 7.1 Desire for More Children

Data on the desire for more children can indicate the direction of future reproductive behaviour, provided that the required family planning services that assist in the realisation of fertility preferences are available, affordable, and accessible. Table 7.1 presents the distribution of currently married women and men age 15-49 by the desire for more children according to the number of living children. The results indicate that the majority of both women and men in Swaziland want to delay or limit the next birth. Women are more likely than men to prefer to limit births ( 68 percent and 52 percent, respectively).

Table 7.1 shows that the desire for more children is directly related to the number of living children a woman or man has. Eighty-two percent of married women who have no children want to have a child, with 57 percent desiring to do so soon. In contrast only 14 percent of women who already had four children expressed a desire for more, and this proportion decreases to two percent amongst women with six or more children.

The proportion of men desiring more children is significantly higher at all birth orders as compared with women. For example, among the SDHS respondents with two children, more than half of men want another child compared with 31 percent of women.

| Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Desire for children | Number of living children |  |  |  |  |  |  | Total |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6+ | 15-49 |
| WOMEN ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Have another soon ${ }^{2}$ | 57.4 | 23.4 | 13.2 | 6.3 | 3.0 | 3.8 | 0.5 | 12.2 |
| Have another later ${ }^{3}$ | 21.7 | 38.3 | 17.6 | 9.5 | 10.6 | 5.4 | 1.6 | 15.1 |
| Have another, undecided when | 2.8 | 2.0 | 0.6 | 0.6 | 0.0 | 0.0 | 0.5 | 0.8 |
| Undecided | 0.9 | 2.4 | 2.4 | 1.3 | 1.5 | 1.7 | 0.0 | 1.5 |
| Want no more | 10.8 | 30.0 | 63.2 | 71.8 | 76.6 | 77.4 | 83.3 | 62.3 |
| Sterilized ${ }^{4}$ | 2.4 | 0.5 | 1.9 | 9.1 | 5.9 | 9.0 | 12.5 | 5.9 |
| Declared infecund | 3.9 | 3.3 | 1.1 | 1.4 | 2.4 | 2.1 | 1.7 | 2.1 |
| Missing | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 131 | 347 | 426 | 343 | 251 | 201 | 363 | 2,062 |
| MEN ${ }^{5}$ |  |  |  |  |  |  |  |  |
| Have another soon ${ }^{2}$ | 60.5 | 23.0 | 14.6 | 10.9 | 12.2 | 8.0 | 5.5 | 15.3 |
| Have another later ${ }^{3}$ | 22.0 | 52.9 | 34.8 | 22.7 | 19.2 | 13.4 | 11.3 | 26.5 |
| Have another, undecided when | 5.6 | 1.9 | 3.4 | 2.0 | 2.3 | 1.7 | 0.5 | 2.2 |
| Undecided | 3.9 | 1.7 | 3.4 | 4.8 | 4.4 | 1.7 | 3.2 | 3.3 |
| Want no more | 4.6 | 18.7 | 41.6 | 54.7 | 60.0 | 75.2 | 77.8 | 50.5 |
| Sterilized ${ }^{4}$ | 1.3 | 0.5 | 1.9 | 4.2 | 1.8 | 0.0 | 1.0 | 1.6 |
| Declared infecund | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 |
| Missing | 2.1 | 1.2 | 0.2 | 0.7 | 0.0 | 0.0 | 0.4 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 70 | 203 | 249 | 181 | 152 | 96 | 268 | 1,219 |
| ${ }^{1}$ The number of living children includes current pregnancy for women. <br> ${ }^{2}$ Wants next birth within 2 years <br> ${ }^{3}$ Wants to delay next birth for 2 or more years <br> ${ }^{4}$ Includes both female and male sterilization <br> ${ }^{5}$ The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife). |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

### 7.2 Desire to Limit Childbearing by Background Characteristics

Tables 7.2.1 and 7.2.2 present the percentages of currently married women and men who want no more children or are sterilized, by the number of living children, according to background characteristics. The results indicate that interest in limiting childbearing is widespread among married women and men, regardless of their socio-economic background.

Looking more closely at the differentials among women in Table 7.2.1, overall, the proportion wishing to limit childbearing is nearly identical for urban and rural women. However, urban women tend to express a desire to limit childbearing at lower parities than rural women. For example, among women with $0-2$ children, 51 percent would like to limit childbearing in urban areas compared with 41 percent in rural areas. Looking at the regional patterns, the proportion seeking to limit childbearing is somewhat higher in Manzini than in the other regions among both women with 0-2 children and those with 3-4 children. Among lower parity women, the proportion desiring no more children generally increases with both education and wealth. In particular, among women with 3-4 children, the proportion wanting to limit childbearing is markedly higher among those with high school or tertiary education compared with less educated women.

Table 7.2.1 Desire to limit childbearing: Women
Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Swaziland 2006

|  | Number of living <br> children |  |  |  |
| :--- | :--- | :---: | :--- | :--- |
| Background <br> characteristic | $0-2$ | $3-4$ | $5+$ | Total |


| Residence |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Urban | 51.1 | 88.8 | 88.0 | 67.8 |
| Rural | 40.9 | 78.6 | 93.0 | 68.4 |
| Region |  |  |  |  |
| Hhohho | 44.6 | 78.4 | 92.9 | 65.5 |
| Manzini | 49.4 | 86.2 | 91.5 | 71.4 |
| Shiselweni | 41.3 | 80.3 | 91.4 | 69.8 |
| Lubombo | 38.3 | 79.6 | 94.2 | 66.0 |
| Highest educational level |  |  |  |  |
| No education | 36.3 | 73.8 | 90.5 | 69.5 |
| Lower primary | 39.9 | (64.8) | 87.7 | 68.4 |
| Higher primary | 43.9 | 80.9 | 93.9 | 70.7 |
| Secondary | 44.1 | 79.3 | 93.5 | 66.7 |
| High school | 48.2 | 91.4 | 100.0 | (67.6) |
| Tertiary | 46.9 | 93.5 | 88.4 | * |
| Wealth quintile |  |  |  |  |
| Lowest | 46.5 | 63.6 | 88.7 | 66.7 |
| Second | 36.2 | 79.8 | 92.2 | 70.3 |
| Middle | 48.8 | 85.8 | 97.7 | 76.0 |
| Fourth | 43.5 | 81.3 | 91.6 | 65.1 |
| Highest | 44.9 | 88.9 | 92.5 | 64.7 |
| Total 15-49 | 44.3 | 81.6 | 92.4 | 68.2 |

Note: Women who have been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ The number of living children includes the current pregnancy.

Table 7.2.2 Desire to limit childbearing: Men
Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Swaziland 2006

| Background characteristic | Number of living children ${ }^{1}$ |  |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | 0-2 | 3-4 | $5+$ |  |
| Residence |  |  |  |  |
| Urban | 32.1 | 70.6 | 82.4 | 55.3 |
| Rural | 26.6 | 52.9 | 75.7 | 50.0 |
| Region |  |  |  |  |
| Hhohho | 29.4 | 58.8 | 79.0 | 53.7 |
| Manzini | 33.4 | 64.2 | 78.6 | 51.6 |
| Shiselweni | 21.6 | 60.5 | 75.1 | 50.6 |
| Lubombo | 25.2 | 58.2 | 77.3 | 51.7 |
| Highest educational level |  |  |  |  |
| No education | (16.4) | 48.8 | 68.8 | 47.4 |
| Lower primary | 20.5 | (50.0) | 81.3 | 47.6 |
| Higher primary | 33.4 | 54.2 | 75.1 | 54.3 |
| Secondary | 20.6 | 60.7 | 75.8 | 50.9 |
| High school | 29.1 | 67.9 | (92.6) | 50.2 |
| Tertiary | 43.9 | 70.2 | (83.7) | 60.1 |
| Wealth quintile |  |  |  |  |
| Lowest | 20.4 | (37.7) | 67.3 | 42.1 |
| Second | 31.8 | (39.7) | 74.6 | 49.0 |
| Middle | 29.5 | 64.6 | 81.5 | 57.7 |
| Fourth | 30.0 | 59.0 | 73.2 | 48.4 |
| Highest | 29.8 | 72.6 | 85.2 | 56.8 |
| Total 15-49 | 29.0 | 60.2 | 77.9 | 52.1 |

Note: Men who have been sterilized or who state in response to the question about desire for children that their wife has been sterilized are considered to want no more children. Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife).

Considering male preferences, men who reside in urban areas are slightly more likely than rural men to desire limiting childbearing. The largest urban-rural differential in the desire to limit childbearing is found among men with 3-4 children; 71 percent of urban men children want no more children compared with 53 percent of rural men. Although not uniform, the desire to limit childbearing among men tends to increase according to level of education and wealth.

Finally, the results in Tables 7.2.1 and 7.2.2 show that the desire to limit childbearing is higher for women than for men irrespective of both socio-economic characteristics and the number of living children. The differentials are especially large among women and men with no education and in the lowest wealth quintiles. For example, among those with no education, 47 percent of men do not want any more children compared with 70 percent of women. Similarly, 42 percent of men and 67 percent of women in the lowest wealth quintile want to limit childbearing.

### 7.3 Need for Family Planning Services

SDHS results can be used to assess the extent of need for family planning services. For this purpose, women who want to postpone their next birth for two or more years or who want to stop childbearing altogether but are not using a contraceptive method are said to have an unmet need for family planning. Pregnant women are considered to have an unmet need for spacing or limiting if their pregnancy was mistimed or unwanted. Similarly, amenorrhoeic women are categorised as having unmet need if their last birth was mistimed or unwanted. Women who are currently using a
contraceptive method are said to have a met need for family planning. The total demand for family planning services comprises those in the met need and unmet need categories.

Table 7.3 presents data on the level of unmet need, met need, and the total demand for family planning services for currently married women age 15-49 by background characteristics. Close to a quarter (24 percent) of currently married women in Swaziland have an unmet need for family planning; 17 percent are in need because they want no more children and 7 percent because they would like to delay the next birth for two or more years. The total met need for family planning (i.e., the proportion currently using contraception) is 51 percent; 38 percent of married women are using contraception to limit the number of children and 13 percent for spacing purposes. Taking both the met and unmet need into account, the total demand for family planning among currently married women in Swaziland is 75 percent. About two-thirds of that demand is satisfied. If this demand is satisfied, the contraceptive prevalence in Swaziland among currently married women will be 75 percent instead of 51 percent.

Table 7.3 Need and demand for family planning among currently married women
Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of satisfied demand for contraception, by background characteristics, Swaziland 2006-07

| Background characteristic | Unmet need for family planning ${ }^{1}$ |  |  | Met need for family planning (currently using) ${ }^{2}$ |  |  | Total demand for family planning |  |  | Percentage of demand satisfied | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \hline \text { For } \\ \text { spacing } \end{gathered}$ | $\begin{gathered} \text { For } \\ \text { limiting } \end{gathered}$ | Total | $\begin{gathered} \hline \text { For } \\ \text { spacing } \end{gathered}$ | $\begin{gathered} \text { For } \\ \text { limiting } \\ \hline \end{gathered}$ | Total | $\begin{gathered} \hline \text { For } \\ \text { spacing } \\ \hline \end{gathered}$ | $\begin{gathered} \text { For } \\ \text { limiting } \end{gathered}$ | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 16.7 | 9.0 | 25.7 | 24.9 | 17.9 | 42.8 | 41.5 | 26.9 | 68.4 | 62.5 | 88 |
| 20-24 | 17.3 | 11.9 | 29.2 | 24.0 | 22.7 | 46.7 | 41.3 | 34.6 | 75.9 | 61.5 | 343 |
| 25-29 | 10.5 | 14.3 | 24.7 | 19.6 | 34.1 | 53.7 | 30.1 | 48.3 | 78.4 | 68.5 | 388 |
| 30-34 | 5.9 | 13.4 | 19.2 | 13.6 | 51.3 | 64.9 | 19.4 | 64.7 | 84.1 | 77.1 | 379 |
| 35-39 | 2.9 | 21.5 | 24.5 | 6.6 | 49.4 | 56.0 | 9.5 | 70.9 | 80.5 | 69.6 | 334 |
| 40-44 | 1.6 | 26.5 | 28.1 | 1.9 | 40.4 | 42.3 | 3.5 | 66.9 | 70.3 | 60.1 | 291 |
| 45-49 | 0.4 | 16.5 | 16.9 | 1.3 | 33.1 | 34.4 | 1.7 | 49.7 | 51.4 | 67.0 | 238 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 5.9 | 14.0 | 19.8 | 15.8 | 42.3 | 58.1 | 21.7 | 56.2 | 77.9 | 74.5 | 542 |
| Rural | 7.9 | 17.6 | 25.5 | 11.6 | 36.4 | 48.0 | 19.5 | 54.0 | 73.5 | 65.3 | 1,520 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 7.8 | 12.6 | 20.3 | 14.4 | 39.3 | 53.7 | 22.2 | 51.9 | 74.0 | 72.5 | 600 |
| Manzini | 5.4 | 17.9 | 23.3 | 13.3 | 39.2 | 52.5 | 18.7 | 57.1 | 75.8 | 69.3 | 650 |
| Shiselweni | 6.9 | 19.6 | 26.4 | 10.8 | 34.8 | 45.6 | 17.6 | 54.4 | 72.0 | 63.3 | 363 |
| Lubombo | 10.2 | 18.0 | 28.1 | 11.3 | 36.7 | 48.0 | 21.4 | 54.7 | 76.1 | 63.1 | 449 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 6.5 | 24.8 | 31.4 | 5.3 | 23.6 | 28.9 | 11.8 | 48.4 | 60.2 | 47.9 | 247 |
| Lower primary | 11.6 | 20.8 | 32.4 | 8.9 | 27.4 | 36.3 | 20.4 | 48.2 | 68.6 | 52.8 | 176 |
| Higher primary | 9.1 | 19.0 | 28.1 | 9.3 | 36.3 | 45.6 | 18.4 | 55.3 | 73.7 | 61.9 | 538 |
| Secondary | 8.0 | 15.4 | 23.5 | 15.1 | 41.0 | 56.1 | 23.1 | 56.5 | 79.5 | 70.5 | 600 |
| High school | 5.1 | 12.9 | 17.9 | 17.0 | 43.0 | 60.0 | 22.0 | 55.9 | 77.9 | 77.0 | 304 |
| Tertiary | 1.7 | 5.8 | 7.4 | 21.1 | 52.5 | 73.7 | 22.8 | 58.3 | 81.1 | 90.9 | 197 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 11.2 | 21.5 | 32.7 | 10.3 | 26.9 | 37.2 | 21.4 | 48.4 | 69.9 | 53.2 | 353 |
| Second | 7.9 | 17.7 | 25.6 | 9.5 | 33.4 | 42.9 | 17.4 | 51.1 | 68.5 | 62.6 | 369 |
| Middle | 5.9 | 18.4 | 24.2 | 10.4 | 43.8 | 54.2 | 16.2 | 62.2 | 78.4 | 69.1 | 379 |
| Fourth | 7.0 | 17.2 | 24.2 | 13.6 | 37.2 | 50.7 | 20.6 | 54.3 | 74.9 | 67.7 | 424 |
| Highest | 5.9 | 11.1 | 17.0 | 17.6 | 44.7 | 62.2 | 23.5 | 55.8 | 79.2 | 78.5 | 537 |
| Currently married | 7.4 | 16.7 | 24.0 | 12.7 | 37.9 | 50.6 | 20.1 | 54.6 | 74.7 | 67.8 | 2,062 |
| Unmarried | 2.6 | 3.0 | 5.5 | 10.6 | 18.3 | 28.9 | 13.2 | 21.2 | 34.4 | 83.9 | 2,925 |
| All women | 4.6 | 8.6 | 13.2 | 11.5 | 26.4 | 37.9 | 16.1 | 35.0 | 51.1 | 74.2 | 4,987 |

[^8]Overall, unmet need does not vary in a uniform manner with age. However, the need for spacing decreases with age, from a high of 17 percent among married women under age 25 to less than one percent in the 45-49 age group; the need for limiting increases from 9 percent among women age $15-19$ to 27 percent of women age 40-44. Unmet need is higher among rural women ( 26 percent) than among women residing in urban areas ( 20 percent). Women in the Lubombo region have the highest level of unmet need ( 28 percent) and women in Hhohho the lowest ( 20 percent). Unmet need is more than four times higher for women with no education ( 31 percent) than for those with tertiary education ( 7 percent). The level of unmet need among women in the lowest wealth quintile ( 33 percent) is nearly twice that among women in the highest quintile (17 percent).

Table 7.3 shows that total demand for family planning, which includes both unmet and met need (contraceptive use), increases with age, peaking at 84 percent among women age 30-34 years. Seventy-seven percent of the demand among women in this age group is satisfied, which is the highest level of satisfied demand across all of the age groups. The total demand for family planning is both slightly greater and more likely to be satisfied among urban than rural women. Although the pattern is not uniform, the total demand for family planning tends to rise with both the education level and wealth quintile. A higher percentage of the demand is satisfied among those women who are more educated and those living in wealthier households than their more disadvantaged counterparts.

Table 7.3 also presents information on the overall level of need for family planning among unmarried women and all women. Women who are not currently married have lower unmet need than married women; 3 percent of currently unmarried women are in need of family planning for spacing and the same percentage are in need of family planning to limit childbearing. Among unmarried women, total demand for family planning is 34 percent, of which 84 percent is being met.

### 7.4 Ideal Number Of Children

This section discusses attitudes about the ideal number of children among women and men age 15-49. To obtain this information, respondents who had no children were asked how many children they would like to have if they could choose the number of children to have in their whole life. Those who had living children were asked about the number of children they would choose if they could start their childbearing again.

Table 7.4 shows the distribution of women and men by their ideal number of children, according to number of living children. In considering the results in Table 7.4, it is important to remember that, for several reasons, the ideal number of children may be fairly closely associated with the actual number of children a woman or a man has. First, women who want a large family tend to have more children than those preferring smaller families. Second, women and men may rationalize their ideal family size so that as the actual number of children increases, their preferred family size also increases. Furthermore, women or men with larger families are on average older than those with small families and may prefer a larger ideal family size because of attitudes that they acquired 20 to 30 years ago.

The results in Table 7.4 indicate that, in general, women in Swaziland do not want many children. Forty-one percent consider 2 children to be ideal, 19 percent prefer 3 children, and 15 percent favour 4 children. Only seven percent consider 5 or more children to be ideal. The mean ideal number of children among women ranges between 2.2 and 3.3 children, irrespective of the number of living children.

| Table 7.4 Ideal number of children |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to number of living children, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  | Number of living children |  |  |  |  |  |  |  |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6+ | Total |
| WOMEN ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Ideal number of children |  |  |  |  |  |  |  |  |
| 0 | 5.2 | 7.2 | 10.7 | 9.0 | 8.4 | 6.0 | 9.3 | 7.5 |
| 1 | 6.2 | 13.9 | 12.4 | 11.6 | 9.9 | 5.4 | 1.9 | 9.2 |
| 2 | 49.5 | 45.3 | 40.6 | 29.0 | 39.9 | 38.9 | 25.6 | 41.4 |
| 3 | 23.7 | 20.5 | 14.8 | 22.0 | 9.6 | 16.8 | 15.2 | 19.2 |
| 4 | 11.7 | 10.0 | 15.6 | 19.3 | 21.5 | 14.0 | 29.9 | 15.4 |
| 5 | 2.2 | 1.7 | 3.4 | 6.4 | 6.4 | 8.3 | 6.7 | 3.8 |
| 6+ | 1.3 | 1.0 | 1.9 | 1.9 | 3.9 | 6.9 | 9.6 | 2.7 |
| Non-numeric responses | 0.2 | 0.3 | 0.7 | 0.8 | 0.3 | 3.7 | 1.8 | 0.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,498 | 1,051 | 761 | 552 | 369 | 279 | 477 | 4,987 |
| Mean ideal number of children for: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| All women | 2.4 | 2.2 | 2.4 | 2.6 | 2.7 | 2.9 | 3.3 | 2.5 |
| Number | 1,495 | 1,047 | 756 | 548 | 368 | 268 | 469 | 4,951 |
| Currently married women | 2.6 | 2.5 | 2.5 | 2.7 | 2.7 | 3.0 | 3.3 | 2.7 |
| Number | 131 | 347 | 423 | 341 | 251 | 193 | 356 | 2,041 |
| MEN ${ }^{3}$ |  |  |  |  |  |  |  |  |
| Ideal number of children |  |  |  |  |  |  |  |  |
| 0 | 2.1 | 2.4 | 2.1 | 1.6 | 1.2 | 2.4 | 2.8 | 2.1 |
| 1 | 3.4 | 4.4 | 5.7 | 2.5 | 4.9 | 0.9 | 1.3 | 3.5 |
| 2 | 39.2 | 38.0 | 32.0 | 26.4 | 25.5 | 25.1 | 18.9 | 35.2 |
| 3 | 27.4 | 33.6 | 25.2 | 23.0 | 9.5 | 25.3 | 15.2 | 25.9 |
| 4 | 16.8 | 14.0 | 21.6 | 28.3 | 34.3 | 13.3 | 28.5 | 19.1 |
| 5 | 6.9 | 5.0 | 8.0 | 9.6 | 13.8 | 16.5 | 8.5 | 7.6 |
| 6+ | 3.7 | 2.4 | 5.1 | 7.8 | 10.0 | 11.2 | 22.9 | 5.8 |
| Non-numeric responses | 0.5 | 0.2 | 0.4 | 0.9 | 0.8 | 5.4 | 1.8 | 0.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 2,469 | 467 | 384 | 241 | 186 | 112 | 296 | 4,156 |
| Mean ideal number of children for: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| All men | 3.0 | 2.8 | 3.2 | 3.5 | 3.7 | 3.6 | 4.6 | 3.2 |
| Number | 2,457 | 466 | 382 | 239 | 185 | 106 | 291 | 4,127 |
| Currently married men | 2.7 | 2.9 | 3.2 | 3.4 | 3.7 | 3.7 | 4.8 | 3.6 |
| Number | 70 | 202 | 247 | 179 | 151 | 91 | 262 | 1,204 |
| ${ }^{1}$ The number of living children includes current pregnancy for women. <br> ${ }^{2}$ Means are calculated excluding respondents who gave non-numeric responses. <br> ${ }^{3}$ The number of living children includes one additional child if respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife). |  |  |  |  |  |  |  |  |

In general, Swazi men desire more children than women. For example, one-third of men consider 4 or more children to be ideal compared with 22 percent of women. The greater desire for larger family size among men is further reflected in the mean ideal number of children, which is 3.2 children among men compared with 2.5 children among women. The results in Table 7.4 also show that the gap between women's and men's childbearing goals widens as the number of living children increases. Women with six or more children want an average of only 3.3 children while men of the same parity would prefer to have 4.6 children.

### 7.5 Mean Ideal Number of Children by Background Characteristics

Table 7.5 shows the men ideal number of children by age and background characteristics for all women age 15-49. As expected, the mean ideal number of children tends to increase as age increases, ranging from 2.4 children among women in the youngest age group to 3.2 among those in the oldest. The mean ideal number of children among urban women is 2.3 compared with 2.6 among rural women. Looking at regional patterns, women from Manzini have the lowest ideal family size ( 2.4 children) and women from Lubombo the highest ( 2.7 children). Desired family size decreases as the level of education increases, from a high of 3.3 children among women with no education to a low of 2.2 for those with high school education. Women in the lowest wealth quintile desire 2.9 children, on average, compared with 2.4 for those in the highest quintile.

### 7.6 Fertility Planning Status

The issue of unplanned and unwanted fertility was further investigated in the 2006-07 SDHS by asking women who had births during the five years before the survey whether the births were wanted at the time (planned), wanted but at a later time (mistimed), or not wanted at all (unwanted). For women who were pregnant at the time of the interview, this question was also asked with reference to the current pregnancy. The procedure required the respondents to recall accurately their wishes at one or more points in the last five years. Care has to be exercised in interpreting the results because an unwanted conception may have become a cherished child, leading to the rationalisation of responses to these questions.

Table 7.6 shows the percent distribution of births in the five years preceding the SDHS by the planning status of the birth. The results indicate that there is a very high level of unplanned childbearing during this period in Swaziland. Overall, only onethird of births in the five years preceding the survey were wanted at the time that they were conceived. Twenty-seven percent of the births were mistimed, i.e., they were wanted later, and 37 percent of births were unwanted. In response to a similar question, Figure 7.1 shows that a nearly identical percentage of births during the five-year period prior to the 1988 Swaziland Family Health Survey (SFHS) were reported by the mother as mistimed ( 26 percent) but only eight percent were reported as unwanted (Ministry of Health, 1990).

Interestingly, the results in Table 7.6 indicate a comparatively high rate of unplanned conceptions among first-order births and among births to women under age 20 at the time of the birth. One-third of all first-order births and 41 percent of births to women less than age 20 were, in fact, unwanted at the time they were conceived.

The proportion of non-first births which were unplanned at the time of conception increases with the child's birth order. Among fourth or higher-order births, for example, 70 percent were unplanned compared with 55 percent of second-order births. Considering the age patterns, more than half of recent births to women age 20-34 were unplanned, and 75 percent of births to women age 4044 fell into this category.

## Table 7.6 Fertility planning status

Percent distribution of births to women age 15-49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Swaziland 2006-07

|  | Planning status of birth |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Birth order and <br> mother's age at birth | Wanted <br> then | Wanted <br> later | Wanted <br> no more | Missing | Total | | Number of |
| :---: |
| births |


| Birth order |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | 32.9 | 33.0 | 34.0 | 0.1 | 100.0 | 979 |
| 2 | 44.5 | 27.9 | 27.4 | 0.2 | 100.0 | 732 |
| 3 | 42.7 | 25.3 | 31.9 | 0.1 | 100.0 | 466 |
| $4+$ | 30.1 | 20.1 | 49.7 | 0.1 | 100.0 | 930 |

Mother's age at birth

| $<20$ | 21.8 | 37.2 | 40.8 | 0.2 | 100.0 | 720 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $20-24$ | 41.1 | 29.4 | 29.3 | 0.2 | 100.0 | 958 |
| $25-29$ | 45.1 | 25.9 | 29.0 | 0.0 | 100.0 | 624 |
| $30-34$ | 41.9 | 18.8 | 39.3 | 0.0 | 100.0 | 458 |
| $35-39$ | 31.5 | 10.9 | 57.6 | 0.0 | 100.0 | 272 |
| $40-44$ | 24.5 | 5.6 | 69.9 | 0.0 | 100.0 | 71 |
| $45-49$ | $*$ | $*$ | $*$ | $*$ | 100.0 | 5 |
|  |  |  |  |  |  |  |
| Total | 36.3 | 26.8 | 36.9 | 0.1 | 100.0 | 3,108 |

Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed

Figure 7.1 Planning Status of Births, 1988 and 2006-07

$\square 1988$ SFHS $\square 2007-07$ SDHS

### 7.7 Wanted Fertility Rates

Using information on whether births occurring in the five years before the survey were wanted or not, a total "wanted" fertility rate can be estimated. The wanted fertility rate is calculated in the same manner as the conventional total fertility rate, except that unwanted births are excluded. A birth is considered wanted if the number of living children at the time of conception was less than the ideal number of children reported by the respondent. The gap between wanted and actual fertility shows how successful women are in achieving their reproductive intentions.

The total wanted fertility rate and total fertility rate for the three years preceding the survey are presented in Table 7.7 by background characteristics. The total wanted fertility rate for all women is 2.1 births. Wanted fertility is highest among women with no education ( 3.0 births) and women in the lowest wealth quintile ( 2.8 births), and lowest among urban women ( 1.8 births) and women in the highest wealth quintile (1.8 births).

Overall, there is a difference of 1.7 births between the wanted fertility rate ( 2.1 births) and the total fertility rate ( 3.8 births). The gap between the wanted and actual fertility rates is greatest among rural women and women from the Lubombo region. On the other hand, women with a tertiary education are closest to achieving their fertility goals.

| Table 7.7 Wanted fertility rates |  |  |
| :---: | :---: | :---: |
| Total wanted fertility rate and total fertility rate for the three years preceding the survey, by background characteristics, Swaziland 2006-07 |  |  |
| Background characteristic | Total wanted fertility rate | Total fertility rate |
| Residence |  |  |
| Urban | 1.8 | 3.0 |
| Rural | 2.2 | 4.2 |
| Region |  |  |
| Hhohho | 2.1 | 3.6 |
| Manzini | 1.9 | 3.7 |
| Shiselweni | 2.4 | 4.3 |
| Lubombo | 2.0 | 4.0 |
| Education |  |  |
| No education | 3.0 | 4.9 |
| Lower primary | 2.4 | 5.1 |
| Higher primary | 2.2 | 4.4 |
| Secondary | 1.9 | 3.9 |
| High school | 1.9 | 3.1 |
| Tertiary | 1.9 | 2.4 |
| Wealth quintile |  |  |
| Lowest | 2.8 | 5.5 |
| Second | 2.3 | 4.9 |
| Middle | 2.0 | 3.9 |
| Fourth | 1.9 | 3.3 |
| Highest | 1.8 | 2.6 |
| Total | 2.1 | 3.8 |

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.2.

## Sri Poedjastoeti

This chapter presents levels, trends, and differentials in neonatal, postneonatal, infant, child, and perinatal mortality. The information is relevant both for understanding population trends-for example, childhood mortality rates are in population projections-and for the planning and evaluation of health policies and programmes. Information on child mortality serves the needs of the health sector by identifying population groups that are at high risk. Because the government of Swaziland through the Ministry of Health and Social Welfare is undertaking a number of interventions aimed at reducing child mortality in the country, the analysis in this report provides an opportunity to evaluate the performance of such programs.

The data for mortality estimation were collected in the birth history section of the Women's Questionnaire. The birth history section began with questions about the respondent's experience with childbearing (i.e., the number of sons and daughters living with the mother, the number who live elsewhere, and the number who have died). These questions were followed by a retrospective birth history in which each respondent was asked to list each of her births, starting with the first birth. For each birth, data were obtained on sex, month and year of birth, survivorship status, and current age or, if the child was dead, age at death. This information is used to directly estimate mortality.

Because the primary cause of mortality changes as children age, the mortality rates presented are age-specific. They are defined as follows:

Neonatal mortality (NN): the probability of dying within the first month of life
Postneonatal mortality (PNN): the difference between infant and neonatal mortality
Infant mortality $\left({ }_{1} \mathrm{q}_{0}\right)$ : the probability of dying before the first birthday
Child mortality $\left({ }_{4} \mathrm{q}_{1}\right)$ : the probability of dying between the first and fifth birthday
Under-five mortality ( $5 \mathrm{q}_{0}$ ): the probability of dying between birth and the fifth birthday
All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

The quality of mortality estimates calculated from retrospective birth histories depends upon the completeness with which births and deaths are reported and recorded. Potentially the most serious data quality problem is the selective omission from the birth histories of births who did not survive, which can lead to underestimation of mortality rates. Other potential problems include displacement of birth dates, which may cause a distortion of mortality trends, and misreporting of the age at death, which may distort the age pattern of mortality. When selective omission of childhood deaths occurs, it is usually most severe for deaths in early infancy. If early neonatal deaths are selectively underreported, the result is an unusually low ratio of deaths occurring within seven days to all neonatal deaths, and an unusually low ratio of neonatal to infant deaths. Underreporting of early infant deaths is most commonly observed for births that occurred long before the survey; hence it is useful to examine the ratios over time.

### 8.1 Data Quality

Because of the increase in infant and child mortality, a thorough review of the SDHS data was conducted. The accuracy of mortality estimates depends on the sampling and on non-sampling errors of the estimates. Sampling variability and sampling errors are discussed in detail in Appendix B.

Tables C.4-C. 6 in Appendix C can be examined for evidence of the possible occurrence of these problems in the mortality data obtained in the 2006-07 SDHS. An unusual pattern in the distribution of births by calendar years is an indication of omission of children or age displacement. In the 2006-07 SDHS, women were asked detailed questions about their births since January 2001. Table C. 4 shows that the overall percentage of births for which a month and year of birth was reported is 100 percent for both children who have died and children who are alive. However, there is some age displacement across this boundary for both living and dead children. Transference is proportionately higher for dead children than living children, and this displacement may affect mortality rates.

Underreporting of deaths is usually assumed to be higher for deaths that occur very early in infancy. Omission of deaths or misclassification of deaths as stillbirths is also common among women who have had several children or whose children died a long time ago. In order to assess the impact of omission on measures of child mortality, two indicators are used: 1) the percentage of deaths that occurred under seven days to the number that occurred under one month and 2) the percentage of neonatal to infant deaths. It is hypothesized that omission will be more prevalent among those who died immediately after birth than those who lived longer and that it will be more serious for events that took place in the distant past rather than those in the more recent past. Table C. 5 shows data on age at death for early infant deaths. Underreporting of early neonatal deaths would result in an unusually low ratio of deaths within the first seven days of life to all neonatal deaths. Early infant deaths have not been severely underreported in the 2006-07 SDHS survey, as suggested by the high ratio of deaths in the first seven days of life to all neonatal deaths ( 81 percent in the five years preceding the survey).

Heaping of the age at death on certain digits is another problem that is inherent in most retrospective surveys. Misreporting of age at death will bias age-specific mortality estimates if the net result is the transference of deaths between age segments for which the rates are calculated. For example, child mortality may be overestimated relative to infant mortality if children who died in the first year of life are reported as having died at age one or older. In an effort to minimise misreporting of age at death, interviewers were instructed to record deaths under one month in days and deaths under two years in months. In addition, they were trained to probe deaths reported at exactly 1 year or 12 months to ensure that they had actually occurred at 12 months. The distribution of deaths under 2 years during the 20 years prior to the survey by month of death shows that there is some heaping at 3 , 12, and 18 months of age with corresponding deficits in adjacent months (Table C.6). However, heaping is less pronounced for deaths in the five years preceding the survey, for which the most recent mortality rates are calculated.

### 8.2 Levels and Trends in Infant and Child Mortality

Table 8.1 shows the trends in neonatal, postneonatal, infant, child, and under-five mortality rates for three successive five-year periods preceding the survey. For the most recent five-year period preceding the survey, infant mortality is 85 deaths per 1,000 live births, and under-five mortality is 120 deaths per 1,000 live births. This means that one in every seven children born in Swaziland dies before attaining his or her fifth birthday.

| Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Swaziland 2006-07 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Years preceding the survey | Approximate calendar period | Neonatal mortality (NN) | Postneonatal mortality ${ }^{1}$ (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Under-five mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| 0-4 | 2002-2006 | 22 | 64 | 85 | 38 | 120 |
| 5-9 | 1997-2001 | 24 | 43 | 67 | 24 | 90 |
| 10-14 | 1992-1996 | 21 | 18 | 39 | 22 | 60 |

${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates

Figure 8.1 shows that Swaziland is among the countries with the highest infant mortality in south-eastern Africa. The infant mortality in Swaziland is only slightly lower than in Lesotho and Rwanda.

Figure 8.1 Infant Mortality Rates in Selected Sub-Saharan African Countries for 0-4 Years Preceding the Survey


Note: Rate for South Africa 10-years prior to the survey
Source: ORC Macro, 2007. MEASURE DHS STATcompiler. http://www.measuredhs.com. Department of Health (DOH) [South Africa] and ORC Macro (Macro). 2004. South Africa Demographic and Health Survey 2003-2004 Preliminary Report. DOH and Macro: Pretoria, South Africa and Calverton, Maryland, U.S.A.

Looking at the age pattern of mortality during the five-year period immediately prior to the survey, 70 percent of the deaths took place during the first year of the child's life. Three-quarters of the deaths during infancy occurred during the postneonatal period, i.e., the child had survived at least one month before dying.

The trend in early childhood mortality since the early 1990s also can be examined by looking at changes in the mortality rates over the three successive five-year periods prior to the survey. From the SDHS results, there is evidence that child mortality may have doubled during that period. For example, as Figure 8.2 shows, the under-five mortality during the most recent period (2002-2006) is twice the level estimated for the period 10-14 years before the survey (1992-1996). Using indirect techniques, the 2000 MICS survey found a similar upward trend (Central Statistical Office, nd).

Figure 8.2 Neonatal, Postneonatal, Infant, Child, and Under-Five Mortality Rates for Five-Year Periods Preceding the Survey


Looking at the age pattern of mortality across the three periods shown in Table 8.1, there is also evidence of a shift to a greater concentration of deaths in the postneonatal period. While neonatal rates have remained virtually the same, there has been a substantial increase in mortality for older children, especially in the postneonatal rates, which have more than tripled.

Some caution needs to be used in interpreting the trend in mortality suggested by the SDHS results since, as discussed above, the problem of underreporting of deaths in birth history data tends to be greater for periods further removed from the survey date. However, the size of the increase in mortality and the change over time in the age pattern of mortality are not unexpected in view of the growth of the HIV epidemic over this period and its expected impact on child mortality.

### 8.3 Socio-economic and Demographic Differentials in Infant and Child Mortality

Differentials in early childhood mortality rates by selected socio-economic and demographic characteristics are presented in Tables 8.2 and 8.3. In order to ensure a sufficient number of births to study mortality differentials across the population subgroups, period-specific rates are presented for the ten-year period preceding the survey (approximately 1998 to 2007) in these tables. Differences in the mortality rates across the subgroups should, nevertheless, be interpreted cautiously because the sampling error remains comparatively large even for the ten-year rates (see Appendix B).

## Socio-economic Differentials

The results in Table 8.2 indicate that the risk of dying early is virtually identical for urban and rural children. Overall, the under-five mortality rate is 105 deaths per 1,000 live births in rural areas and 107 in urban areas. The differentials in mortality levels are somewhat larger by region, especially during infancy. Neonatal mortality is lowest in Lubombo and Shiselweni, but postneonatal mortality is highest in these regions.

| Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Neonatal mortality ( NN ) | Postneonatal mortality ${ }^{1}$ (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left(4 q_{1}\right)$ | Under-five mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| Residence |  |  |  |  |  |
| Urban | 21 | 53 | 74 | 36 | 107 |
| Rural | 23 | 54 | 78 | 30 | 105 |
| Region |  |  |  |  |  |
| Hhohho | 24 | 47 | 71 | 27 | 96 |
| Manzini | 33 | 49 | 82 | 33 | 112 |
| Shiselweni | 16 | 60 | 76 | 26 | 100 |
| Lubombo | 15 | 63 | 78 | 39 | 115 |
| Mother's education |  |  |  |  |  |
| No education | 12 | 84 | 96 | 61 | 151 |
| Lower primary | 6 | 29 | 35 | 45 | 78 |
| Higher primary | 29 | 58 | 87 | 31 | 115 |
| Secondary | 27 | 49 | 75 | 29 | 102 |
| High school | 25 | 59 | 83 | 15 | 97 |
| Tertiary | 16 | 32 | 48 | 5 | 53 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 17 | 68 | 84 | 37 | 118 |
| Second | 35 | 36 | 71 | 30 | 99 |
| Middle | 16 | 50 | 65 | 34 | 97 |
| Fourth | 18 | 61 | 79 | 37 | 114 |
| Highest | 29 | 55 | 84 | 18 | 101 |
| ${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates |  |  |  |  |  |

As expected, a mother's education is inversely related to a child's risk of dying. Under-five mortality among children born to mothers with no education (151 deaths per 1,000 live births) is almost three times as high as that of children born to mothers with tertiary education ( 53 deaths per 1,000 live births). The relationship between wealth and mortality is not consistent, although children born to mothers in the highest wealth quintile are at much lower risk of dying between their first and fifth birthday than children born to mothers in the other quintiles.

## Demographic Differentials

The demographic characteristics of both mother and child have been found to play an important role in the survival probability of children. Table 8.3 presents early childhood mortality rates by demographic characteristics (i.e., sex of child, mother's age at birth, birth order, previous birth interval, and birth size). The data show little difference in mortality between male and female children. Typically, the relationship between maternal age at birth and childhood mortality is generally U-shaped, being relatively higher among children born to mothers under age 20 and over age 40 than among mothers in the middle age groups (Table 8.3). This pattern is not present in Swaziland. While mortality rates do not vary much for children born to women under age 40 , births to women age 40 and older have much higher mortality risks than births to younger women. The birth order of the child also has little influence on Swazi children's mortality risks.

Studies have found that short birth intervals significantly reduce a child's chance of survival. However, in Swaziland, children born within three years of a preceding birth have lower survival rates than children born with both a shorter or longer interval after the previous birth. A child's birth weight is also an important determinant of its survival chances. In the 2006-07 SDHS survey, mothers were asked whether their child was very large, larger than average, average, smaller than average, or small at birth since this has been found to be a good proxy for a child's weight. As expected, smaller babies have higher mortality rates than babies who are reported to be average or larger than average. For example, neonatal mortality for children regarded as very small or small is twice that of children reported as average or large in size.

| Table 8.3 Early childhood mortality rates by demographic characteristics |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by demographic characteristics, Swaziland 2006-07 |  |  |  |  |  |
| Demographic characteristic | Neonatal mortality (NN) | Postneonatal mortality ${ }^{1}$ (PNN) | Infant mortality $\left({ }_{1} q_{0}\right)$ | Child mortality $\left({ }_{4} q_{1}\right)$ | Under-five mortality $\left({ }_{5} \mathrm{q}_{0}\right)$ |
| Child's sex |  |  |  |  |  |
| Male | 23 | 58 | 80 | 30 | 108 |
| Female | 23 | 50 | 73 | 32 | 103 |
| Mother's age at birth |  |  |  |  |  |
| <20 | 18 | 55 | 73 | 36 | 107 |
| 20-29 | 23 | 52 | 75 | 31 | 104 |
| 30-39 | 26 | 50 | 76 | 23 | 98 |
| 40-49 | 33 | 120 | 152 | 103 | 240 |
| Birth order |  |  |  |  |  |
| 1 | 22 | 54 | 76 | 34 | 107 |
| 2-3 | 18 | 55 | 73 | 31 | 101 |
| 4-6 | 32 | 50 | 82 | 28 | 107 |
| 7+ | 23 | 59 | 82 | 34 | 114 |
| Previous birth interval ${ }^{2}$ |  |  |  |  |  |
| $<2$ years | 36 | 54 | 90 | 48 | 134 |
| 2 years | 26 | 50 | 76 | 34 | 108 |
| 3 years | 11 | 46 | 57 | 20 | 75 |
| $4+$ years | 21 | 60 | 82 | 22 | 102 |
| Birth size ${ }^{3}$ |  |  |  |  |  |
| Small/very small | 34 | 76 | 110 | na | na |
| Average or larger | 17 | 62 | 78 | na | na |
| na = Not applicable |  |  |  |  |  |
| ${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates |  |  |  |  |  |
| ${ }^{2}$ Excludes first-order births |  |  |  |  |  |
| ${ }^{3}$ Rates for the five-year period before the survey |  |  |  |  |  |

### 8.4 Perinatal Mortality

The 2006-07 SDHS asked women to report on any pregnancy loss that occurred in the five years preceding the survey. For each pregnancy that did not end in a live birth, the duration of pregnancy was recorded. Pregnancy losses occurring after seven completed months of gestation (stillbirths) plus deaths to live births within the first seven days of life (early neonatal deaths) constitute perinatal deaths. The distinction between a stillbirth and an early neonatal death may be a fine one, often depending on observing and then remembering sometimes faint signs of life after delivery. The causes of stillbirths and early neonatal deaths are closely linked, and examining just one or the other can understate the true level of mortality around delivery. In this report, perinatal deaths include pregnancy losses of at least seven months' gestation (stillbirths) and deaths to live births within the first seven days of life (early neonatal deaths). The perinatal mortality rate is the sum of stillbirths and early neonatal deaths divided by the sum of all stillbirths and live births.

Table 8.4 presents the number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey. Perinatal mortality increases with mother's age at birth. It is significantly higher among women whose age at birth was 40 years or over. The variations in perinatal mortality by the other characteristics shown in Table 8.4 are generally small or do not exhibit a consistent pattern.

| Table 8.4 Perinatal mortality |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Swaziland 2006-07 |  |  |  |  |
| Background characteristic | Number of stillbirths ${ }^{1}$ | Number of early neonatal deaths ${ }^{2}$ | Perinatal mortality rate ${ }^{3}$ | Number of pregnancies of $7+$ months duration |
| Mother's age at birth |  |  |  |  |
| <20 | 8 | 8 | 23 | 669 |
| 20-29 | 17 | 27 | 31 | 1,443 |
| 30-39 | 9 | 12 | 32 | 680 |
| 40-49 | 1 | 1 | 38 | 72 |
| Previous pregnancy interval in months ${ }^{4}$ |  |  |  |  |
| First pregnancy | 12 | 15 | 30 | 887 |
| <15 | 2 | 0 | 22 | 84 |
| 15-26 | 6 | 16 | 45 | 489 |
| 27-38 | 4 | 9 | 26 | 503 |
| 39+ | 12 | 9 | 23 | 901 |
| Residence |  |  |  |  |
| Urban | 5 | 14 | 30 | 636 |
| Rural | 30 | 35 | 29 | 2,229 |
| Region |  |  |  |  |
| Hhohho | 4 | 15 | 25 | 770 |
| Manzini | 9 | 17 | 29 | 879 |
| Shiselweni | 10 | 9 | 31 | 626 |
| Lubombo | 12 | 8 | 34 | 590 |
| Mother's education |  |  |  |  |
| No education | 3 | 1 | 14 | 266 |
| Lower primary | 8 | 3 | 41 | 252 |
| Higher primary | 14 | 13 | 35 | 761 |
| Secondary | 7 | 21 | 29 | 958 |
| High School | 3 | 9 | 26 | 459 |
| Tertiary | 2 | 2 | 21 | 168 |
| Wealth quintile |  |  |  |  |
| Lowest | 10 | 11 | 36 | 582 |
| Second | 11 | 11 | 36 | 614 |
| Middle | 8 | 10 | 31 | 562 |
| Fourth | 3 | 6 | 16 | 557 |
| Highest | 3 | 11 | 26 | 550 |
| Total | 35 | 49 | 29 | 2,864 |
| ${ }^{1}$ Stillbirths are foetal deaths in pregnancies lasting seven or more months. |  |  |  |  |
| ${ }^{2}$ Early neonatal deaths are deaths at age 0-6 days among live-born children. |  |  |  |  |
| ${ }^{3}$ The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1000. |  |  |  |  |
| ${ }^{4}$ Categories correspond to birth intervals of $<24$ mos., $24-35$ mos., $36-47$ mos., and $48+$ mos. |  |  |  |  |

### 8.5 High-Risk Fertility Behaviour

Findings from scientific studies have confirmed that there is a strong relationship between children's chances of dying and certain fertility behaviours. Typically, the probability of dying in early childhood is much greater if children are born to mothers who are too young or too old, if they are born after a short preceding birth interval, or if they are high-parity births. Very young mothers may experience difficult pregnancies and deliveries because of their physical immaturity. Older women may also experience age-related problems during pregnancies and delivery. In this analysis, a mother is considered to be "too young" if she is less than 18 years and "too old" if she is above 34 years at the time of delivery. A "short birth interval" is a birth occurring within 24 months of a previous birth.

Table 8.5 shows the distribution of children born in the five years preceding the survey by risk category. First births, which make up 22 percent of births, are considered "unavoidable" and are shown as a separate risk category. Including first births, more than half of births in Swaziland are in a "risk-free" category, while 47 percent are at an elevated risk avoidable death. Thirty-three percent of births are in a single high-risk category, and 15 percent are in a multiple high-risk category. The most
common single high-risk category is births of order 3 and higher ( 16 percent), while the most common multiple high-risk category is births of order 3 or higher born to mothers older than 34 years (9 percent).

The risk ratios displayed in the second column of Table 8.5 represent the increased risk of mortality among births in various high-risk categories relative to births with no high-risk characteristics. The most vulnerable births are those to women age 18 or younger, and births of order 3 or higher that were born less than 24 months after an older sibling. This group of children is 60 percent more likely to die than children not in any high-risk category. Four percent of births are in this category.

The last column in Table 8.5 looks to the future and addresses the question of how many currently married women have the potential for having a high-risk birth. The results were obtained by simulating the risk category into which a birth to a currently married woman would fall if she were to become pregnant at the time of the survey. The data in the table show that overall more than twothirds of currently married women have the potential of having a highrisk birth if they were to become pregnant. The risk is elevated for 29 percent of women because they would be both too old (age 34 or older) and have too many children (more than 3 children).

Table 8.5 High-risk fertility behaviour
Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Swaziland 2006-07

|  | Births in the 5 years <br> preceding the survey |  |
| :--- | :---: | ---: | :---: |
| Percentage of <br> births | Risk <br> ratio | Percentage <br> of currently <br> married <br> women |
| Risk category |  |  |

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
na $=$ Not applicable
${ }^{1}$ Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
${ }^{2}$ Includes the category age $<18$ and birth order $>3$
${ }^{\text {a }}$ Includes sterilised women

## Nhlanhla M. Nhlabatsi

The health care that a mother receives during pregnancy, at the time of delivery, and soon after delivery is important for the survival and well-being of both the mother and her child. This chapter presents findings on several areas of importance to maternal health: antenatal, delivery, and postnatal care, and problems in accessing health care. These findings are important to policymakers and programme implementers in formulating programmes and policies, and in designing appropriate strategies and interventions to improve maternal and child health care services.

Information on antenatal care (ANC) is of great value both in identifying subgroups of women who do not utilize such services and in planning improvements in the services. The data on ANC from the 2006-07 SDHS provide details on the type of service provider, the number of ANC visits made, the stage of pregnancy at the time of the first and last visits, and the services and information provided during ANC, including whether a tetanus toxoid injection was received.

### 9.1 Antenatal Care

The major objective of antenatal care is to identify and treat problems during pregnancy such as anaemia and infections. Antenatal care visits include screening for complications and advice on a range of issues such as place of delivery and referral of mothers with complications. In the SDHS, interviewers recorded the source of antenatal care and the person who provided that care for women's most recent births. If a woman received antenatal care from more than one provider, the provider with the highest qualifications was recorded. Table 9.1 shows the background characteristics of women who had live births in the five years preceding the survey according to the type of antenatal care provider.

Table 9.1 presents the distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth. The table also presents the percentage of women receiving antenatal care from a skilled provider for the most recent birth. Nearly all women in Swaziland ( 97 percent) receive antenatal care from a skilled provider such as a doctor, nurse, midwife, or nursing assistant. Nurses and midwives are the most common providers of antenatal care; three out of four women having a live birth in the previous five years received antenatal care from a nurse or midwife. Twelve percent of women received care from a nursing assistant, and only nine percent of women received ANC from a doctor.

Access to antenatal services offered by a skilled provider is nearly universal among 97 percent across all background characteristics. ANC services are accessed by all types of women, but there is a tendency for women of higher education levels and higher wealth quintiles to be more likely than women of lower education levels and lower wealth quintiles to see a doctor for ANC services. Eleven percent of women with a high school education and 31 percent of women with tertiary schooling received ANC from a doctor, while only three percent of women with no education did so.

Three percent of women did not receive any ANC services at all. While the importance of reaching these women is clear, the proportion is too small to draw any significant conclusions regarding the background characteristics of these women.

Table 9.1 Antenatal care provider
Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Swaziland, 2006-07

| Background characteristic | Doctor | Nurse/ midwife | Nursing assistant | Other | No one | Missing | Total | Percentage receiving antenatal care from a skilled provider ${ }^{1}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |
| <20 | 5.9 | 80.3 | 11.5 | 0.2 | 2.2 | 0.0 | 100.0 | 97.6 | 481 |
| 20-34 | 9.5 | 74.5 | 13.1 | 0.2 | 2.6 | 0.1 | 100.0 | 97.1 | 1,382 |
| 35-49 | 9.3 | 77.3 | 9.5 | 0.5 | 3.2 | 0.3 | 100.0 | 96.0 | 271 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 1 | 9.3 | 76.0 | 13.1 | 0.0 | 1.6 | 0.0 | 100.0 | 98.4 | 652 |
| 2-3 | 8.2 | 77.1 | 12.3 | 0.3 | 1.9 | 0.1 | 100.0 | 97.6 | 835 |
| 4-5 | 8.2 | 74.4 | 13.1 | 0.2 | 4.1 | 0.0 | 100.0 | 95.6 | 349 |
| 6+ | 8.9 | 75.9 | 9.6 | 0.4 | 4.6 | 0.6 | 100.0 | 94.4 | 298 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 11.8 | 74.1 | 12.3 | 0.0 | 1.6 | 0.2 | 100.0 | 98.2 | 496 |
| Rural | 7.7 | 76.8 | 12.3 | 0.3 | 2.9 | 0.1 | 100.0 | 96.7 | 1,638 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 9.5 | 76.4 | 11.3 | 0.2 | 2.4 | 0.2 | 100.0 | 97.3 | 572 |
| Manzini | 8.2 | 85.1 | 5.0 | 0.1 | 1.5 | 0.1 | 100.0 | 98.3 | 668 |
| Shiselweni | 6.4 | 70.1 | 19.1 | 0.0 | 4.4 | 0.0 | 100.0 | 95.6 | 460 |
| Lubombo | 10.5 | 68.6 | 17.5 | 0.7 | 2.5 | 0.2 | 100.0 | 96.6 | 434 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 3.0 | 81.3 | 12.0 | 0.0 | 3.1 | 0.5 | 100.0 | 96.3 | 178 |
| Lower primary | 8.4 | 75.1 | 11.0 | 0.7 | 4.3 | 0.5 | 100.0 | 94.5 | 177 |
| Higher primary | 5.5 | 75.7 | 14.0 | 0.4 | 4.4 | 0.0 | 100.0 | 95.2 | 550 |
| Secondary | 7.3 | 78.3 | 12.3 | 0.2 | 1.7 | 0.1 | 100.0 | 97.9 | 716 |
| High school | 10.5 | 76.6 | 12.3 | 0.0 | 0.6 | 0.0 | 100.0 | 99.4 | 374 |
| Tertiary | 30.6 | 60.8 | 6.6 | 0.0 | 2.0 | 0.0 | 100.0 | 98.0 | 140 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 5.0 | 75.9 | 14.2 | 0.4 | 4.3 | 0.2 | 100.0 | 95.1 | 400 |
| Second | 5.8 | 75.8 | 13.3 | 0.8 | 4.2 | 0.2 | 100.0 | 94.8 | 429 |
| Middle | 7.0 | 76.7 | 13.8 | 0.0 | 2.5 | 0.0 | 100.0 | 97.5 | 419 |
| Fourth | 10.0 | 78.6 | 10.0 | 0.0 | 1.2 | 0.2 | 100.0 | 98.6 | 436 |
| Highest | 14.9 | 74.0 | 10.4 | 0.0 | 0.8 | 0.0 | 100.0 | 99.2 | 449 |
| Total | 8.6 | 76.2 | 12.3 | 0.2 | 2.6 | 0.1 | 100.0 | 97.1 | 2,134 |

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. Other includes women receiving care from a traditional birth attendant or rural health motivator, a traditional healer, or another person.
${ }^{1}$ Skilled provider includes doctor, nurse, midwife, and nursing assistant

### 9.2 Number of ANC Visits, Timing of First Visit, and Source Where ANC Received

Antenatal care is more beneficial in preventing adverse pregnancy outcomes when it is sought early in the pregnancy and is continued through to delivery. Health professionals recommend that the first antenatal visit should occur within the first three months of pregnancy and continue on a monthly basis through the $28^{\text {th }}$ week of pregnancy and every two weeks up to the $36^{\text {th }}$ week (or until birth). Under normal circumstances, WHO recommends that a woman without complications have at least four ANC visits, the first of which should take place during the first trimester.

Table 9.2 presents information on antenatal care visits. including the number of visits, the timing of the first visit, and the source where ANC was provided. Seventy-nine percent of women whose last birth occurred in the five years before the survey made four or more ANC visits during their pregnancy. However, half of women (48 percent) did not make their first visit until the second trimester, and only
one-quarter of women had their first ANC visit during their first trimester. Thus, the median number of months pregnant among those who go for their first ANC visit is five months. A large proportion of women continue to delay the initiation of antenatal care, thus missing out on potential benefits of early antenatal care services.

The public sector is still the main source of ANC services, serving two-thirds of women (68 percent). While urban and rural women are generally similar in their behaviour with regard to the timing and frequency of receiving ANC services, rural women are more likely than urban women to avail themselves of the public providers. Seventy-two percent of rural women received ANC from the public sector, while 57 percent of urban women did so. Ten percent of women utilize government hospitals, and the government public health units and clinics remain the most common source of ANC services, providing care to 46 percent of women. Fifteen percent of urban women utilize private providers of ANC services, and 6 percent of rural women do so.

### 9.3 Components of Antenatal Care

Knowledge of the content of antenatal care is essential for assessing the quality of antenatal care services. Pregnancy complications are a primary source of maternal and child morbidity and mortality. Therefore, ensuring that pregnant women receive information on the signs of complications and testing for complications should be routinely included in all antenatal care visits. To help assess ANC services, respondents were asked whether they had been advised of complications, received certain drugs, or received certain screening tests during at least one of their antenatal visits.

Table 9.3 presents information on the percentage of women who took iron supplements, took intestinal parasite drugs, and received selected services during antenatal care visits during the pregnancy of their most recent birth in the last five years. Nine in ten women ( 88 percent) who had a live birth in the five years prior to the survey took iron tablets or syrup. While over 80 percent of women of all background characteristics shown in the table are provided iron tablets or syrup, receipt increases from eight in ten women to nine in ten women with increasing education and wealth quintile.

Table 9.2 Number of antenatal care visits, timing of first visit, and source where ANC received

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and percentage of women receiving antenatal care from various sources for most recent birth, according to residence, Swaziland 2006-07

| Number and timing of ANC visits | Residence |  | Total |
| :---: | :---: | :---: | :---: |
|  | Urban | Rural |  |
| Number of ANC visits |  |  |  |
| None | 1.6 | 2.9 | 2.6 |
| 1 | 0.5 | 1.0 | 0.9 |
| 2-3 | 11.7 | 15.1 | 14.3 |
| 4+ | 84.1 | 77.8 | 79.3 |
| Don't know/missing | 2.1 | 3.2 | 3.0 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of months pregnant at time of first ANC visit |  |  |  |
| No antenatal care | 1.6 | 2.9 | 2.6 |
| <4 | 32.1 | 23.9 | 25.8 |
| 4-5 | 45.9 | 48.1 | 47.6 |
| 6-7 | 18.7 | 23.3 | 22.2 |
| 8+ | 1.5 | 1.2 | 1.3 |
| Don't know/missing | 0.1 | 0.6 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 |
| Place where ANC care received |  |  |  |
| Public sector | 57.2 | 71.7 | 68.3 |
| Government hospital | 10.3 | 10.5 | 10.4 |
| Government health centre | 8.4 | 14.2 | 12.8 |
| PHU/clinic/other | 39.6 | 48.5 | 46.4 |
| Private medical sector | 14.9 | 5.6 | 7.8 |
| Mission | 20.8 | 18.0 | 18.7 |
| Hospital | 11.8 | 4.8 | 6.5 |
| Clinic/other | 8.4 | 12.6 | 11.6 |
| Other | 0.5 | 0.6 | 0.6 |
| NGO | 6.8 | 3.0 | 3.9 |
| Other ${ }^{1}$ | 0.5 | 1.1 | 0.9 |
| Missing | 0.0 | 0.1 | 0.1 |
| Number of women | 496 | 1,638 | 2,134 |
| Median months pregnant at first visit (for those with ANC) | 4.7 | 5.1 | 5.0 |
| Number of women with ANC | 487 | 1,589 | 2,077 |

Note: Women may have received ANC care at more than one place, so percentages may not add to 100.
PHU = Public Health Unit
NGO = Non-governmental organisation
${ }^{1}$ Includes respondent's home or other home and other places

| Table 9.3 Components of antenatal care |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among women age 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |
|  | Among women with a live birth in the last five years, the percentage who during the pregnancy of their last birth: |  |  | Among women who received antenatal care for their most recent birth in the last five years, the percentage with selected services: |  |  |  |  |  |  |
| Background characteristic | Took iron tablets or syrup | Took intestinal parasite drugs | Number of women with a live birth in the past five years | Informed of signs of pregnancy complications | Weighed | Blood pressure measured | Urine sample taken | Blood sample taken | Physically examined | Number of women with ANC for their most recent birth |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |  |
| <20 | 88.6 | 10.9 | 481 | 45.8 | 98.6 | 97.5 | 86.4 | 89.5 | 76.2 | 471 |
| 20-34 | 88.3 | 10.5 | 1,382 | 54.1 | 99.1 | 98.0 | 92.5 | 92.6 | 78.8 | 1,344 |
| 35-49 | 87.3 | 9.1 | 271 | 65.9 | 99.5 | 98.1 | 95.2 | 93.2 | 79.8 | 262 |
| Birth order |  |  |  |  |  |  |  |  |  |  |
| 1 | 89.3 | 10.8 | 652 | 51.0 | 98.9 | 98.2 | 89.2 | 91.4 | 77.1 | 641 |
| 2-3 | 88.0 | 9.9 | 835 | 52.0 | 99.0 | 97.7 | 91.6 | 91.9 | 79.4 | 818 |
| 4-5 | 88.6 | 9.9 | 349 | 57.1 | 99.2 | 97.7 | 92.2 | 92.6 | 78.1 | 335 |
| $6+$ | 86.1 | 11.6 | 298 | 60.7 | 99.5 | 98.3 | 95.3 | 92.6 | 78.0 | 282 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 88.1 | 7.5 | 496 | 61.3 | 99.4 | 99.1 | 96.8 | 96.0 | 85.0 | 487 |
| Rural | 88.3 | 11.3 | 1,638 | 51.3 | 98.9 | 97.5 | 89.8 | 90.7 | 76.3 | 1,589 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 90.8 | 8.0 | 572 | 55.7 | 99.1 | 97.9 | 92.1 | 95.2 | 78.7 | 557 |
| Manzini | 90.2 | 8.5 | 668 | 54.3 | 99.6 | 98.4 | 95.8 | 96.5 | 79.4 | 657 |
| Shiselweni | 87.3 | 15.7 | 460 | 58.0 | 99.3 | 98.8 | 86.5 | 90.1 | 84.4 | 440 |
| Lubombo | 82.9 | 10.9 | 434 | 45.5 | 97.8 | 96.3 | 89.1 | 82.7 | 69.9 | 422 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 82.5 | 12.4 | 178 | 46.2 | 97.7 | 95.7 | 82.3 | 85.3 | 70.8 | 171 |
| Lower primary | 85.3 | 14.1 | 177 | 53.3 | 98.6 | 96.3 | 85.7 | 86.4 | 71.2 | 168 |
| Higher primary | 86.9 | 10.8 | 550 | 51.5 | 98.8 | 97.1 | 89.7 | 90.5 | 74.7 | 526 |
| Secondary | 89.1 | 10.1 | 716 | 53.2 | 99.1 | 98.1 | 93.8 | 93.4 | 80.3 | 702 |
| High school | 89.8 | 7.6 | 374 | 56.0 | 99.7 | 99.8 | 94.5 | 94.7 | 82.8 | 372 |
| Tertiary | 95.9 | 10.7 | 140 | 68.1 | 100.0 | 100.0 | 96.7 | 97.6 | 88.4 | 137 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 84.7 | 13.4 | 400 | 43.1 | 98.9 | 96.3 | 81.5 | 84.3 | 71.7 | 382 |
| Second | 85.6 | 12.4 | 429 | 52.3 | 99.1 | 97.2 | 90.3 | 91.1 | 73.0 | 410 |
| Middle | 88.0 | 9.4 | 419 | 54.4 | 98.4 | 97.8 | 92.3 | 92.7 | 81.8 | 409 |
| Fourth | 91.1 | 9.7 | 436 | 55.4 | 99.4 | 98.5 | 95.4 | 95.1 | 78.8 | 430 |
| Highest | 91.3 | 7.4 | 449 | 61.6 | 99.3 | 99.4 | 96.5 | 95.6 | 85.3 | 446 |
| Total | 88.2 | 10.4 | 2,134 | 53.7 | 99.0 | 97.9 | 91.5 | 92.0 | 78.3 | 2,077 |

Administration of intestinal parasite drugs is far less common than administration of iron supplementation, having been given to only one in ten women. Administration of drugs to combat intestinal parasites is most common in Shiselweni, where 16 percent of women took such drugs. Use of drugs to combat parasites shows a slight tendency to increase with decreasing wealth quintile, from 7 percent among women in the highest wealth quintile to 13 percent among women in the lowest wealth quintile.

Virtually all women who went for ANC services were weighed and had their blood pressure measured ( 99 percent and 98 percent, respectively). Blood and urine tests are a nearly universal component of ANC as well, each having been reported by 92 percent of women who received ANC services. However, blood and urine testing are less common among women as their educational level declines, as are physical examinations and being informed of pregnancy complications. While physical examinations are provided to eight in ten women overall, only seven in ten women with no education are given a physical examination. Being informed of the signs of pregnancy complications is the least frequently offered component of ANC, having been explained to only 54 percent of women who gave a birth in the five years prior to the survey. Only 46 percent of women under the age of 20 were informed of the signs of pregnancy complications.

The low proportion of women that are informed of the signs of pregnancy complications needs to be addressed; service providers should ensure that all women seeking ANC services receive comprehensive care. This is especially true as a substantial proportion of pregnant women in Swaziland continue to deliver at home, subjecting themselves to higher risks of mortality.

### 9.4 Tetanus Toxoid Injections

Neonatal tetanus is a leading cause of neonatal death in developing countries where a high proportion of deliveries are conducted either at home or in places where hygienic conditions may be poor. Tetanus toxoid (TT) vaccinations are given to pregnant women to prevent neonatal tetanus. If a woman has received no previous TT injections, a pregnant woman needs two doses of TT during pregnancy in order to be fully protected. However, if a woman was immunized before she became pregnant, she may require one or no TT injections during her pregnancy, depending on the number of injections she has received in the past, and the timing of the last injection. A total of five doses is required for a woman to have lifetime protection.

The 2006-07 SDHS collected data on whether or not women received at least two TT injections during pregnancy and whether or not the pregnancy was protected against neonatal tetanus for women's most recent live birth in the five years preceding the survey. Table 9.4 shows that 68 percent of women received two or more tetanus toxoid injections during their last pregnancy. This resulted in three-quarters of women with a live birth in the five years prior to the survey having protected their most recent birth against neonatal tetanus.

| Table 9.4 Tetanus toxoid injections |  |  |  |
| :---: | :---: | :---: | :---: |
| Among mothers age 15-49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections (TTI) during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Swaziland 2006-07 |  |  |  |
| Background characteristic | Percentage receiving two or more injections during last pregnancy | Percentage whose last live birth was protected against neonatal tetanus ${ }^{1}$ | Number of mothers |
| Mother's age at birth |  |  |  |
| <20 | 68.7 | 71.4 | 481 |
| 20-34 | 69.0 | 76.6 | 1,382 |
| 35-49 | 58.6 | 72.4 | 271 |
| Birth order |  |  |  |
| 1 | 71.8 | 73.1 | 652 |
| 2-3 | 67.8 | 77.1 | 835 |
| 4-5 | 65.4 | 75.7 | 349 |
| 6+ | 60.4 | 71.6 | 298 |
| Residence |  |  |  |
| Urban | 73.0 | 80.4 | 496 |
| Rural | 66.0 | 73.3 | 1,638 |
| Region |  |  |  |
| Hhohho | 64.2 | 73.6 | 572 |
| Manzini | 72.6 | 77.4 | 668 |
| Shiselweni | 71.1 | 77.5 | 460 |
| Lubombo | 60.6 | 70.0 | 434 |
| Education |  |  |  |
| No education | 56.7 | 64.2 | 178 |
| Lower primary | 63.6 | 72.7 | 177 |
| Higher primary | 63.2 | 71.3 | 550 |
| Secondary | 70.9 | 78.7 | 716 |
| High school | 71.1 | 77.1 | 374 |
| Tertiary | 77.3 | 80.2 | 140 |
| Wealth quintile |  |  |  |
| Lowest | 61.7 | 69.5 | 400 |
| Second | 63.6 | 71.7 | 429 |
| Middle | 68.2 | 75.8 | 419 |
| Fourth | 73.9 | 80.2 | 436 |
| Highest | 70.0 | 76.8 | 449 |
| Total | 67.6 | 74.9 | 2,134 |
| ${ }^{1}$ Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within ten years of the last live birth), or five or more injections prior to the last birth. |  |  |  |

While older women of higher parity are less likely than younger women to have received two doses of TT, they are also more likely to have received TT doses during earlier pregnancies, resulting in over 70 percent of women of all ages and parity having protected their babies against neonatal tetanus. However, women with less education are less likely to have TT coverage than women with more education. Approximately six in ten mothers ( 64 percent) with no education had babies that were protected against neonatal tetanus, while seven in ten mothers ( 72 percent) with primary education had babies that were protected, and nearly eight in ten mothers ( 78 percent) with secondary or higher education levels had babies that were protected against neonatal tetanus.

### 9.5 Place of Delivery

Increasing the number of babies delivered in health facilities is an important factor in reducing the health risks to both the mother and the baby. Proper medical attention and hygienic conditions during delivery can reduce the risks of complications and infections that can cause morbidity and mortality to either the mother or the baby. Table 9.5 presents the percent distribution of live births born in the five years preceding the survey by place of delivery, according to background characteristics.

Forty-three percent of births are delivered at a public sector health facility, 27 percent at a mission, and 4 percent at a private sector health facility or at a non-governmental health facility. Thus, seventy-four percent of births in Swaziland are delivered at a health facility, while 25 percent are still delivered at home. The Swaziland Community Health Survey 2002 reported that in 1995, 44 percent of women delivered at home, and in 2002, 26 percent delivered at home (MOHSW, 2004).

Only one in ten urban births is delivered at home, while one in three rural births is delivered at home. The proportion of births delivered at home increases steadily with increasing birth order. While only 14 percent of first births are delivered at home, 25 percent of second and third births are delivered at home, 31 percent of fourth and fifth births are delivered at home, and 44 percent of birth orders six and higher are delivered at home.

The proportion of births born in a health facility rises steadily with increasing education and increasing wealth quintile of the mother. Only half of babies born to mothers in the lowest wealth quintile are born in a health facility, and this proportion rises steadily with increasing wealth quintile, reaching 92 percent among babies born to women in the highest wealth quintile. Similarly by education, only 57 percent of babies born to women with no education are born in a health facility, and this proportion rises steadily with increasing level of education, reaching 91 percent among babies born to women with high school education and 95 percent among babies born to women with tertiary education. Babies that received no ANC are the most likely to be delivered at home ( 65 percent).

Table 9.5 Place of delivery
Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Swaziland 2006-07

| Background characteristic | Health facility |  |  | Home | Other | Missing | Total | Percentage delivered in a health facility | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Private sector |  |  |  |  |  |  |  |
|  | Public sector | Mission | $\begin{gathered} \hline \text { Private } \\ \text { medical/ } \\ \mathrm{NGO} \\ \hline \end{gathered}$ |  |  |  |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |
| <20 | 40.3 | 34.1 | 2.0 | 23.3 | 0.3 | 0.0 | 100.0 | 76.4 | 661 |
| 20-34 | 45.6 | 24.9 | 4.6 | 24.2 | 0.5 | 0.2 | 100.0 | 75.1 | 1,852 |
| 35-49 | 35.0 | 24.2 | 4.5 | 35.8 | 0.3 | 0.3 | 100.0 | 63.7 | 315 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 1 | 47.1 | 34.6 | 3.7 | 14.0 | 0.4 | 0.1 | 100.0 | 85.4 | 890 |
| 2-3 | 45.0 | 24.0 | 5.4 | 25.0 | 0.5 | 0.1 | 100.0 | 74.5 | 1,072 |
| 4-5 | 41.5 | 23.5 | 2.9 | 31.3 | 0.3 | 0.4 | 100.0 | 68.0 | 475 |
| 6+ | 31.4 | 21.9 | 1.8 | 44.1 | 0.5 | 0.2 | 100.0 | 55.1 | 391 |
| Antenatal care visits ${ }^{1}$ |  |  |  |  |  |  |  |  |  |
| None | 23.8 | 10.0 | 0.0 | 64.5 | 1.7 | 0.0 | 100.0 | 33.8 | 55 |
| 1-3 | 39.7 | 23.6 | 2.8 | 33.1 | 0.7 | 0.0 | 100.0 | 66.1 | 325 |
| 4+ | 44.4 | 29.7 | 4.6 | 20.9 | 0.3 | 0.0 | 100.0 | 78.7 | 1,691 |
| Don't know/missing | 48.5 | 25.1 | 1.7 | 24.6 | 0.0 | 0.0 | 100.0 | 75.4 | 64 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 45.1 | 35.3 | 8.4 | 11.0 | 0.2 | 0.1 | 100.0 | 88.8 | 630 |
| Rural | 42.7 | 24.6 | 2.7 | 29.4 | 0.5 | 0.2 | 100.0 | 70.0 | 2,199 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 63.5 | 9.3 | 5.7 | 21.2 | 0.1 | 0.1 | 100.0 | 78.6 | 766 |
| Manzini | 32.7 | 43.2 | 4.0 | 19.8 | 0.0 | 0.4 | 100.0 | 79.8 | 870 |
| Shiselweni | 57.2 | 5.8 | 2.0 | 33.8 | 1.1 | 0.0 | 100.0 | 65.1 | 615 |
| Lubombo | 17.1 | 48.6 | 3.6 | 29.8 | 0.8 | 0.1 | 100.0 | 69.3 | 577 |
| Highest educational level |  |  |  |  |  |  |  |  |  |
| No education | 31.4 | 24.0 | 1.8 | 42.1 | 0.2 | 0.5 | 100.0 | 57.2 | 263 |
| Lower primary | 30.9 | 23.9 | 0.5 | 43.2 | 1.2 | 0.3 | 100.0 | 55.3 | 245 |
| Higher primary | 39.2 | 22.9 | 2.5 | 34.2 | 1.0 | 0.2 | 100.0 | 64.6 | 748 |
| Secondary | 46.8 | 30.6 | 2.1 | 20.4 | 0.2 | 0.0 | 100.0 | 79.5 | 951 |
| High school | 55.3 | 30.3 | 5.3 | 8.9 | 0.0 | 0.2 | 100.0 | 90.9 | 457 |
| Tertiary | 43.9 | 24.7 | 26.5 | 4.9 | 0.0 | 0.0 | 100.0 | 95.1 | 166 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 29.7 | 18.9 | 1.4 | 48.5 | 1.3 | 0.2 | 100.0 | 50.0 | 572 |
| Second | 40.1 | 23.9 | 1.4 | 33.9 | 0.3 | 0.4 | 100.0 | 65.4 | 603 |
| Middle | 51.8 | 24.3 | 2.3 | 21.3 | 0.3 | 0.0 | 100.0 | 78.5 | 554 |
| Fourth | 46.4 | 35.4 | 4.4 | 13.6 | 0.0 | 0.2 | 100.0 | 86.2 | 554 |
| Highest | 48.8 | 33.0 | 10.6 | 7.3 | 0.3 | 0.1 | 100.0 | 92.4 | 546 |
| Total | 43.2 | 27.0 | 4.0 | 25.3 | 0.4 | 0.2 | 100.0 | 74.1 | 2,829 |

${ }^{1}$ Includes only the most recent birth in the five years preceding the survey

### 9.6 Assistance during Delivery

In addition to place of birth, assistance during childbirth is an important variable that influences the birth outcome and the health of the mother and the infant. The skills and performance of the birth attendant will affect whether or not hygienic practices are observed, and whether or not complications can be managed. Table 9.6 shows the percent distribution of live births in the five years preceding the survey by person providing assistance, according to background characteristics.

Table 9.6 Assistance during delivery
Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of birth assisted by a skilled provider, and percentage delivered by caesarean section, according to background characteristics, Swaziland 2006-07

| Background characteristic | Person providing assistance during delivery |  |  |  |  |  |  |  | Percentage delivered by a skilled provider ${ }^{1}$ | Percentage delivered by C-section | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctor | Nurse/ midwife | Nursing assistant | Traditional birth attendant/ healer | Relative/ friends/ other | No one | Don't know/ missing | Total |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |  |  |
| <20 | 11.9 | 59.3 | 5.1 | 5.1 | 16.7 | 1.9 | 0.1 | 100.0 | 76.2 | 8.1 | 661 |
| 20-34 | 12.2 | 57.8 | 5.4 | 5.5 | 15.2 | 3.7 | 0.2 | 100.0 | 75.4 | 7.5 | 1,852 |
| 35-49 | 13.6 | 44.6 | 5.4 | 5.0 | 17.4 | 13.8 | 0.3 | 100.0 | 63.5 | 9.9 | 315 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 15.5 | 64.8 | 5.4 | 3.1 | 10.2 | 0.9 | 0.2 | 100.0 | 85.6 | 10.6 | 890 |
| 2-3 | 12.1 | 56.6 | 6.0 | 6.7 | 15.9 | 2.7 | 0.1 | 100.0 | 74.7 | 7.4 | 1,072 |
| 4-5 | 9.2 | 53.8 | 4.6 | 7.0 | 17.8 | 7.2 | 0.4 | 100.0 | 67.6 | 4.8 | 475 |
| 6+ | 9.2 | 42.1 | 4.3 | 4.7 | 25.7 | 13.8 | 0.2 | 100.0 | 55.6 | 6.7 | 391 |
| Place of delivery |  |  |  |  |  |  |  |  |  |  |  |
| Health facility | 16.5 | 76.2 | 6.9 | 0.0 | 0.2 | 0.2 | 0.0 | 100.0 | 99.5 | 10.6 | 2,097 |
| Elsewhere | 0.2 | 0.9 | 0.9 | 20.7 | 60.7 | 16.5 | 0.1 | 100.0 | 2.1 | 0.0 | 727 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 17.5 | 63.0 | 7.6 | 2.7 | 6.9 | 2.1 | 0.1 | 100.0 | 88.1 | 8.4 | 630 |
| Rural | 10.7 | 54.9 | 4.7 | 6.1 | 18.3 | 5.1 | 0.2 | 100.0 | 70.3 | 7.7 | 2,199 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 13.1 | 60.0 | 5.1 | 4.6 | 13.6 | 3.3 | 0.2 | 100.0 | 78.3 | 8.4 | 766 |
| Manzini | 12.9 | 64.4 | 2.6 | 3.8 | 12.5 | 3.4 | 0.4 | 100.0 | 79.9 | 7.5 | 870 |
| Shiselweni | 9.3 | 50.3 | 6.4 | 8.3 | 21.3 | 4.4 | 0.0 | 100.0 | 65.9 | 7.6 | 615 |
| Lubombo | 13.4 | 47.6 | 8.5 | 5.4 | 17.7 | 7.3 | 0.1 | 100.0 | 69.5 | 8.1 | 577 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 5.5 | 49.6 | 2.1 | 7.0 | 24.7 | 10.7 | 0.5 | 100.0 | 57.2 | 6.0 | 263 |
| Lower primary | 11.9 | 40.9 | 2.9 | 7.6 | 28.9 | 7.4 | 0.5 | 100.0 | 55.7 | 8.5 | 245 |
| Higher primary | 10.6 | 48.3 | 6.1 | 6.8 | 21.7 | 6.2 | 0.2 | 100.0 | 65.1 | 5.9 | 748 |
| Secondary | 11.8 | 61.8 | 5.8 | 5.3 | 12.2 | 3.1 | 0.0 | 100.0 | 79.4 | 8.3 | 951 |
| High school | 12.7 | 72.0 | 6.3 | 1.8 | 6.4 | 0.5 | 0.2 | 100.0 | 91.1 | 8.7 | 457 |
| Tertiary | 32.3 | 57.7 | 5.1 | 2.6 | 1.8 | 0.4 | 0.0 | 100.0 | 95.1 | 14.2 | 166 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 7.8 | 37.1 | 5.7 | 7.3 | 31.8 | 10.0 | 0.3 | 100.0 | 50.6 | 6.7 | 572 |
| Second | 10.1 | 52.3 | 3.6 | 7.5 | 20.8 | 5.3 | 0.3 | 100.0 | 66.0 | 8.0 | 603 |
| Middle | 11.4 | 59.8 | 6.8 | 5.6 | 13.6 | 2.8 | 0.0 | 100.0 | 77.9 | 7.9 | 554 |
| Fourth | 15.4 | 66.3 | 4.8 | 3.8 | 6.9 | 2.7 | 0.2 | 100.0 | 86.4 | 8.4 | 554 |
| Highest | 16.9 | 69.3 | 6.0 | 2.0 | 4.7 | 0.8 | 0.1 | 100.0 | 92.3 | 8.6 | 546 |
| Total | 12.3 | 56.7 | 5.3 | 5.3 | 15.8 | 4.4 | 0.2 | 100.0 | 74.3 | 7.9 | 2,829 |

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
Total includes five women with information missing on place of delivery.
${ }^{1}$ Skilled provider includes doctor, nurse, midwife, and nursing assistant

Seventy-four percent of births in the previous five years are delivered by a skilled provider (doctor, nurse, midwife, or nursing assistant); 12 percent by a doctor, 57 percent by nurses and midwives, and 5 percent by a nursing assistant. In the absence of a nurse or midwife, relatives or friends are the next most common person to assist a delivery (16 percent). Five percent of births are assisted by traditional birth attendants and 4 percent are assisted by no one.

The likelihood of being assisted by a doctor is higher among births to older women (age 35-49), first order births, births in urban areas, and births delivered in a health facility. Doctors are also more likely to deliver births to better educated women and women in the higher quintiles. For example, 6 percent of births to women of no education are assisted by a doctor compared with 32 percent of births to mothers with tertiary education. Similarly, 8 percent of births to women of the lowest wealth quintile are assisted by a doctor during delivery compared with 17 percent of births in the highest wealth quintile.

Relatives and friends play a key role in assisting delivery among births in all subgroups, but more importantly among higher order births, births in rural areas, to women with low education and in the lowest wealth quintiles. About one in five births in Shiselweni and Lubombo regions are assisted by a relative or friend.

Fourteen percent of births born to women age 35 and older and 14 percent of births of parity 6 and higher are born unassisted. One in ten births to women with no education and one in ten births to women in the lowest wealth quintile are born without the assistance of anyone. Most births delivered outside a health facility are assisted by a friend or relative (61 percent), 21 percent of births are assisted by a traditional birth attendant or healer, and 17 percent are delivered with no assistance.

Table 9.6 also presents data on prevalence of births by caesarean (C-) section. Eight percent of live births in the five years before the survey are delivered by C-section. The percentage may be more a reflection of the limited emergency obstetric care that is available in Swaziland, rather than the total percentage of pregnancies with complications for which C-section was indicated for assuring safe delivery and reducing the risk of maternal mortality.

### 9.7 Postnatal Care

A large proportion of maternal and neonatal deaths occur during the first 48 hours after delivery. Thus, postnatal care is important for both the mother and the child to treat complications arising from the delivery, as well as to provide the mother with important information on how to care for herself and her child. It is recommended that all women receive a check on their health within two days of delivery. To assess the extent of postnatal care utilization, respondents were asked if, for the last birth in the five years preceding the survey, they had received a health check after the delivery, the timing of the first checkup, and the type of health provider performing the postnatal checkup. This information is presented according to background characteristics in Tables 9.7 and 9.8.

Most women in Swaziland ( 75 percent) do not receive a postnatal check. Only one in five women (22 percent) was examined within two days of delivering a live birth. Few women ( 2 percent) had a checkup up within 3 to 41 days of delivery. Rural women are more likely than urban women to not have a postnatal checkup ( 77 percent of rural and 67 percent of urban women receive no postnatal checkup). As with other health services surrounding childbirth, women of lower education levels and lower wealth quintiles are less likely than women of higher education and higher wealth quintiles to receive a postnatal checkup. The provider of postnatal checkups is as likely to be a nurse or midwife as a doctor. Eleven percent of women received a postnatal checkup from a nurse or midwife, and 11 percent received a postnatal checkup from a doctor (Table 9.8).

| Table 9.7 Timing of first postnatal checkup |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution of the mother's first postnatal checkup for the last live birth by time after delivery, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
| Timing after delivery of mother's first postnatal checkup |  |  |  |  |  |  |  |  |
| Background characteristic | Less than 4 hours | $\begin{gathered} 4-23 \\ \text { hours } \\ \hline \end{gathered}$ | $\begin{array}{r} 1-2 \\ \text { days } \\ \hline \end{array}$ | $\begin{aligned} & 3-41 \\ & \text { days } \\ & \hline \end{aligned}$ | Don't know/ missing | No postnatal checkup ${ }^{1}$ | Total | Number of women |
| Mother's age at birth |  |  |  |  |  |  |  |  |
| <20 | 7.6 | 4.2 | 5.8 | 1.8 | 0.9 | 79.7 | 100.0 | 481 |
| 20-34 | 11.7 | 3.8 | 7.8 | 1.6 | 1.1 | 74.0 | 100.0 | 1,382 |
| 35-49 | 11.6 | 4.6 | 9.4 | 3.3 | 0.9 | 70.3 | 100.0 | 271 |
| Birth order |  |  |  |  |  |  |  |  |
| 1 | 9.4 | 4.7 | 5.7 | 1.4 | 1.2 | 77.7 | 100.0 | 652 |
| 2-3 | 11.7 | 3.3 | 8.8 | 2.5 | 0.8 | 72.9 | 100.0 | 835 |
| 4-5 | 9.4 | 4.6 | 8.7 | 0.6 | 0.9 | 75.7 | 100.0 | 349 |
| 6+ | 12.4 | 3.7 | 6.9 | 2.5 | 1.5 | 73.0 | 100.0 | 298 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 16.3 | 6.2 | 9.2 | 0.6 | 0.9 | 66.7 | 100.0 | 496 |
| Rural | 9.0 | 3.3 | 7.1 | 2.2 | 1.1 | 77.3 | 100.0 | 1,638 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 11.4 | 3.9 | 7.4 | 1.4 | 1.6 | 74.4 | 100.0 | 572 |
| Manzini | 12.5 | 5.3 | 6.9 | 1.9 | 0.7 | 72.7 | 100.0 | 668 |
| Shiselweni | 9.2 | 2.7 | 9.9 | 2.8 | 1.1 | 74.3 | 100.0 | 460 |
| Lubombo | 8.7 | 3.6 | 6.3 | 1.5 | 0.7 | 79.2 | 100.0 | 434 |
| Education |  |  |  |  |  |  |  |  |
| No education | 5.5 | 2.9 | 5.1 | 2.2 | 1.1 | 83.2 | 100.0 | 178 |
| Lower primary | 8.5 | 2.2 | 8.2 | 2.4 | 1.5 | 77.4 | 100.0 | 177 |
| Higher primary | 8.2 | 2.4 | 6.7 | 1.8 | 1.2 | 79.7 | 100.0 | 550 |
| Secondary | 11.6 | 4.3 | 6.1 | 1.8 | 1.1 | 75.0 | 100.0 | 716 |
| High school | 12.5 | 6.4 | 11.0 | 2.2 | 0.4 | 67.6 | 100.0 | 374 |
| Tertiary | 20.9 | 5.9 | 11.9 | 0.7 | 0.7 | 60.0 | 100.0 | 140 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 5.8 | 1.7 | 6.1 | 2.4 | 2.1 | 81.9 | 100.0 | 400 |
| Second | 8.0 | 3.3 | 6.9 | 3.3 | 0.8 | 77.7 | 100.0 | 429 |
| Middle | 10.8 | 2.5 | 6.8 | 1.0 | 1.4 | 77.5 | 100.0 | 419 |
| Fourth | 15.4 | 5.3 | 8.4 | 1.5 | 0.2 | 69.2 | 100.0 | 436 |
| Highest | 13.2 | 6.9 | 9.4 | 1.2 | 0.7 | 68.6 | 100.0 | 449 |
| Total | 10.7 | 4.0 | 7.6 | 1.9 | 1.0 | 74.8 | 100.0 | 2,134 |
| ${ }^{1}$ Includes women who received a checkup after 41 days |  |  |  |  |  |  |  |  |


| Among women age 15-49 giving birth in the five years preceding the survey, the percent distribution by type of provider of the mother's first postnatal health check for the last live birth, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Type of health provider of mother's first postnatal checkup |  |  |  |  | No postnatal checkup ${ }^{1}$ | Total | Number of women |
|  | Doctor | Nurse/ midwife | Nursing assistant | Other | $\begin{aligned} & \hline \text { Don't } \\ & \text { know/ } \\ & \text { missing } \end{aligned}$ |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |
| <20 | 8.5 | 9.6 | 1.7 | 0.5 | 0.0 | 79.7 | 100.0 | 481 |
| 20-34 | 11.4 | 11.8 | 2.3 | 0.3 | 0.1 | 74.0 | 100.0 | 1,382 |
| 35-49 | 13.7 | 13.1 | 2.1 | 0.8 | 0.0 | 70.3 | 100.0 | 271 |
| Birth order |  |  |  |  |  |  |  |  |
| 1 | 10.9 | 9.4 | 1.7 | 0.3 | 0.0 | 77.7 | 100.0 | 652 |
| 2-3 | 12.7 | 11.5 | 2.6 | 0.4 | 0.0 | 72.9 | 100.0 | 835 |
| 4-5 | 6.5 | 14.5 | 2.7 | 0.3 | 0.3 | 75.7 | 100.0 | 349 |
| 6+ | 12.1 | 12.6 | 1.3 | 0.7 | 0.3 | 73.0 | 100.0 | 298 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 16.4 | 12.4 | 4.2 | 0.3 | 0.0 | 66.7 | 100.0 | 496 |
| Rural | 9.4 | 11.2 | 1.5 | 0.4 | 0.1 | 77.3 | 100.0 | 1,638 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 11.8 | 10.2 | 3.1 | 0.5 | 0.0 | 74.4 | 100.0 | 572 |
| Manzini | 14.2 | 10.7 | 2.1 | 0.2 | 0.1 | 72.7 | 100.0 | 668 |
| Shiselweni | 10.4 | 12.5 | 2.3 | 0.5 | 0.0 | 74.3 | 100.0 | 460 |
| Lubombo | 5.9 | 13.3 | 0.9 | 0.4 | 0.2 | 79.2 | 100.0 | 434 |
| Education |  |  |  |  |  |  |  |  |
| No education | 7.9 | 6.6 | 1.2 | 1.1 | 0.0 | 83.2 | 100.0 | 178 |
| Lower primary | 6.2 | 14.7 | 0.5 | 1.2 | 0.0 | 77.4 | 100.0 | 177 |
| Higher primary | 8.5 | 8.9 | 2.4 | 0.4 | 0.2 | 79.7 | 100.0 | 550 |
| Secondary | 10.4 | 12.5 | 1.9 | 0.0 | 0.1 | 75.0 | 100.0 | 716 |
| High school | 13.3 | 14.9 | 3.6 | 0.6 | 0.0 | 67.6 | 100.0 | 374 |
| Tertiary | 28.6 | 9.7 | 1.7 | 0.0 | 0.0 | 60.0 | 100.0 | 140 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 6.2 | 9.8 | 1.2 | 0.9 | 0.0 | 81.9 | 100.0 | 400 |
| Second | 7.9 | 11.6 | 2.3 | 0.2 | 0.2 | 77.7 | 100.0 | 429 |
| Middle | 9.8 | 10.2 | 2.5 | 0.0 | 0.0 | 77.5 | 100.0 | 419 |
| Fourth | 13.8 | 15.1 | 1.2 | 0.5 | 0.2 | 69.2 | 100.0 | 436 |
| Highest | 17.0 | 10.6 | 3.4 | 0.4 | 0.0 | 68.6 | 100.0 | 449 |
| Total | 11.1 | 11.5 | 2.1 | 0.4 | 0.1 | 74.8 | 100.0 | 2,134 |

${ }^{1}$ Includes women who received a checkup after 41 days

### 9.8 Problems in Accessing Health Care

Many factors can prevent women from getting medical advice or treatment for themselves when they are sick. Information on such factors is particularly important in understanding and addressing the barriers women may face in seeking care during pregnancy and at the time of delivery.

In the 2006-07 SDHS, women were asked whether each of the following factors would be a big problem or not a big problem in seeking medical care: getting permission to go for treatment, getting money for treatment, distance to a health facility, having to take transportation, not wanting to go alone, concern that there may not be a female health care provider available, concern that there may not be any health care provider available, and concern that there may be no drugs available.

Table 9.9 indicates that 78 percent of women had at least one problem accessing health care. The barriers to accessing health services are predominantly those related to service provision. Seven in ten women (69 percent) reported the unavailability of drugs as being a problem in accessing health care. The next most commonly reported perceived problem, cited by four in ten women, is the unavailability of a health care provider; whether or not the provider is female is of concern only to a minority of women (8 percent). About one-quarter of women have problems accessing health care because of the cost of services and the distance to a facility. Eighteen percent of women experience transport problems in
accessing health services. Other limitations of access are mentioned by a minority of women. Eleven percent report not wanting to go alone, and two percent report needing to get permission to go for health services.

Most problems in accessing health care services are more commonly experienced by rural women than by urban women, although the service provision concerns are still considered to be big problems by urban women as well. Distance, money, and transport are all more likely to be cited as problems by women in Shiselweni and Lubombo regions (cited by approximately one-third of women) than by women in Hhohho and Manzini. Women in Shiselweni and Lubombo are also especially likely to report not wanting to go alone as a big problem (14 and 21 percent, respectively). Nearly all the problems in accessing health services are experienced by a declining proportion of women as their education and wealth quintile increase.

| Table 9.9 Problems in accessing health care |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |
|  | Problems in accessing health care |  |  |  |  |  |  |  |  | Number of women |
| Background characteristic | Getting permission to go for treatment | Getting money for treatment | Distance to health facility | Having to take transport | Not wanting to go alone | Concern no female provider available | Concern no provider available | Concern no drugs available | At least one problem accessing health care |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 1.5 | 21.2 | 24.6 | 19.0 | 12.5 | 10.4 | 39.8 | 66.3 | 76.5 | 1,274 |
| 20-34 | 1.8 | 24.6 | 22.8 | 17.8 | 9.7 | 6.4 | 39.9 | 68.7 | 77.6 | 2,391 |
| 35-49 | 1.9 | 30.1 | 27.5 | 18.5 | 11.1 | 6.7 | 40.3 | 70.4 | 78.1 | 1,323 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |
| 0 | 1.8 | 19.7 | 21.0 | 16.7 | 11.9 | 9.4 | 39.0 | 66.8 | 75.9 | 1,601 |
| 1-2 | 1.4 | 22.4 | 22.7 | 16.8 | 9.0 | 6.1 | 39.6 | 67.0 | 75.5 | 1,754 |
| 3-4 | 2.3 | 29.2 | 25.7 | 19.1 | 10.0 | 6.5 | 40.3 | 69.6 | 77.6 | 887 |
| 5+ | 2.2 | 38.5 | 34.9 | 24.2 | 13.6 | 7.9 | 42.8 | 74.5 | 85.1 | 745 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 1.4 | 23.2 | 22.7 | 17.1 | 10.4 | 8.0 | 40.5 | 67.6 | 76.4 | 2,487 |
| Married or living together | 2.3 | 24.2 | 25.5 | 19.2 | 11.0 | 7.1 | 39.1 | 68.7 | 77.5 | 2,062 |
| Divorced/separated/widowed | 1.4 | 41.3 | 30.1 | 20.6 | 11.4 | 6.3 | 41.1 | 73.0 | 83.1 | 438 |
| Employed last 12 months |  |  |  |  |  |  |  |  |  |  |
| Not employed | 1.8 | 27.6 | 26.7 | 20.2 | 11.4 | 8.3 | 41.9 | 70.0 | 79.3 | 2,796 |
| Employed for cash | 1.8 | 21.3 | 20.6 | 15.3 | 9.0 | 6.1 | 36.8 | 66.0 | 74.2 | 2,072 |
| Employed not for cash | 2.9 | 34.1 | 42.8 | 24.8 | 27.4 | 14.0 | 53.7 | 81.2 | 90.3 | 106 |
| Missing | 5.5 | 34.9 | 22.0 | 26.6 | 17.3 | 0.0 | 22.5 | 48.3 | 77.7 | 13 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 2.2 | 15.2 | 7.1 | 5.1 | 5.2 | 4.6 | 33.5 | 58.5 | 65.1 | 1,330 |
| Rural | 1.6 | 28.8 | 30.8 | 23.1 | 12.8 | 8.6 | 42.3 | 72.1 | 81.9 | 3,657 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 0.9 | 17.5 | 17.0 | 12.8 | 5.6 | 5.8 | 42.6 | 69.4 | 76.0 | 1,340 |
| Manzini | 2.0 | 20.9 | 18.1 | 13.3 | 6.6 | 5.5 | 31.1 | 59.7 | 69.2 | 1,647 |
| Shiselweni | 1.2 | 34.0 | 33.8 | 23.6 | 14.3 | 8.4 | 50.3 | 78.1 | 86.5 | 1,033 |
| Lubombo | 3.2 | 33.6 | 35.9 | 28.7 | 21.3 | 12.3 | 40.6 | 72.1 | 83.8 | 966 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 1.7 | 42.7 | 35.9 | 28.6 | 14.6 | 8.4 | 41.3 | 78.6 | 87.8 | 402 |
| Lower primary | 2.9 | 42.6 | 38.5 | 30.5 | 19.2 | 11.2 | 42.7 | 71.8 | 85.3 | 360 |
| Higher primary | 1.7 | 31.5 | 30.2 | 23.1 | 13.1 | 10.0 | 44.6 | 73.7 | 84.0 | 1,268 |
| Secondary | 1.9 | 21.7 | 21.6 | 14.6 | 9.4 | 6.2 | 39.2 | 66.9 | 75.4 | 1,693 |
| High school | 1.8 | 16.2 | 18.8 | 14.6 | 8.5 | 6.2 | 37.8 | 65.1 | 72.7 | 894 |
| Tertiary | 0.6 | 4.7 | 6.4 | 4.5 | 2.6 | 3.2 | 29.4 | 52.5 | 56.9 | 370 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 1.8 | 45.1 | 45.6 | 34.0 | 21.5 | 11.2 | 42.6 | 75.6 | 89.3 | 785 |
| Second | 1.9 | 38.8 | 33.7 | 25.7 | 14.5 | 9.0 | 42.7 | 74.9 | 87.6 | 862 |
| Middle | 1.9 | 27.4 | 28.9 | 21.2 | 8.6 | 8.0 | 45.2 | 73.1 | 80.6 | 968 |
| Fourth | 2.3 | 16.3 | 17.4 | 12.9 | 8.9 | 6.0 | 38.6 | 67.5 | 75.0 | 1,111 |
| Highest | 1.2 | 9.6 | 7.9 | 5.9 | 4.8 | 5.0 | 33.7 | 57.1 | 62.9 | 1,262 |
| Total | 1.8 | 25.2 | 24.5 | 18.3 | 10.8 | 7.5 | 40.0 | 68.5 | 77.5 | 4,987 |

Note: Total includes 13 women with information missing on employment in last 12 months.

## CHILD HEALTH

## Zodwa Dlamini-Mthethwa

This chapter presents findings on several areas of importance to child health and survival including information on birth weight and size at birth, the vaccination status of young children, and treatment practices among children suffering from the three childhood diseases that are among the most common causes of deaths among young children.

### 10.1 Child's Size at Birth

A child's birth weight or size at birth is an important indicator of the child's vulnerability to the risk of childhood illnesses and the chances of survival. Table 10.1 presents information on child's weight and size at birth for all births in the five years prior to the SDHS according to background characteristics. Birth weights were recorded in the SDHS for 84 percent of all births in the five years preceding the survey. These data were based on either a written record if available or the mother's recall. In addition to asking about birth weight, mothers were also asked if they had considered the child to be very small, smaller than average, average, or larger than average at birth. The mother's assessment of the baby's size at birth was obtained for 97 percent of all of the births. Although this size estimate is subjective, it has been shown to be a useful proxy for the birth weight (Blanc and Wardlaw, 2005).

Children whose birth weight is less than 2.5 kilogrammes, or children reported to be "very small" or "smaller than average" are considered to have a higher than average risk of early childhood death. Table 10.1 shows that, of all the children born in the last five years before the survey, 8 percent had a birth weight less than 2.5 kilogrammes. This represents an increase from 5 percent previously estimated through the 2000 Multiple Indicator Cluster Survey (CSO, nd). Low birth weight is most prevalent among babies born to women with no education (12 percent) while women with a tertiary education are least likely to have a baby weighing less than 2.5 kilogrammes ( 4 percent).

Data from the SDHS on the mothers’ assessment of the birth size of their children are also presented in Table 10.1. Two percent of the children born during the five years preceding the survey were reported to be very small while 12 percent were said to be smaller than average. Similar to the pattern observed in the birth weight data, babies born to women with no education are most likely and babies born to women with a tertiary education are least likely to be reported as being very small or smaller than average at birth (18 percent and 8 percent, respectively).

### 10.2 Vaccination Coverage

Universal immunisation of children against the vaccine-preventable diseases is crucial to reducing infant and child mortality. Thus, the SDHS information on vaccination coverage among young children is very helpful for programme planning and targeting resources to areas most in need.

### 10.2.1 Collection of Data

The 2006-07 SDHS collected the data on vaccination coverage for all living children born in the five years preceding the survey. Information on vaccination coverage was collected in two ways in the SDHS: from child health cards shown to the interviewer and from mothers' verbal reports. If the cards were available, the interviewer copied the vaccination dates directly onto the questionnaire. When there was no card for the child or if a vaccine had not been recorded on the card as being given, the respondent was asked to recall the vaccines given to her child.

| Table 10.1 Child's weight and size at birth |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of all live births in the five years preceding the survey with a reported birth weight by birth weight; percent distribution of all live births in the five years preceding the survey by mother's estimate of baby's size at birth; and percentage of all births with a reported birth weight, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Percent distribution of births with a reported birth weight ${ }^{1}$ |  | Total | Number of births | Percentage of births with a reported birth weight | Percent distribution of births by size of child at birth |  |  |  | TotalNumber of <br> births |  |
|  |  |  | Very small |  |  | Smaller than average | Average or larger | Don't know/ missing |  |  |
|  | $\begin{gathered} \hline \text { Less than } \\ 2.5 \mathrm{~kg} \\ \hline \end{gathered}$ | 2.5 kg or more |  |  |  |  |  |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |  |  |
| <20 | 10.2 | 89.8 | 100.0 | 559 | 84.6 | 3.6 | 15.2 | 79.4 | 1.7 | 100.0 | 661 |
| 20-34 | 7.2 | 92.8 | 100.0 | 1,569 | 84.7 | 1.3 | 10.6 | 84.8 | 3.3 | 100.0 | 1,852 |
| 35-49 | 5.7 | 94.3 | 100.0 | 240 | 76.0 | 1.6 | 12.8 | 78.5 | 7.2 | 100.0 | 315 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 10.5 | 89.5 | 100.0 | 790 | 88.8 | 3.2 | 15.3 | 79.6 | 2.0 | 100.0 | 890 |
| 2-3 | 6.4 | 93.6 | 100.0 | 907 | 84.6 | 1.2 | 10.4 | 86.0 | 2.4 | 100.0 | 1,072 |
| 4-5 | 5.7 | 94.3 | 100.0 | 385 | 81.1 | 1.2 | 9.0 | 85.1 | 4.7 | 100.0 | 475 |
| 6+ | 7.6 | 92.4 | 100.0 | 285 | 72.8 | 1.5 | 11.9 | 79.0 | 7.5 | 100.0 | 391 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 8.9 | 91.1 | 100.0 | 589 | 93.5 | 3.0 | 13.2 | 81.9 | 2.0 | 100.0 | 630 |
| Rural | 7.4 | 92.6 | 100.0 | 1,779 | 80.9 | 1.6 | 11.5 | 83.2 | 3.7 | 100.0 | 2,199 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 9.5 | 90.5 | 100.0 | 672 | 87.8 | 2.0 | 13.6 | 82.9 | 1.5 | 100.0 | 766 |
| Manzini | 7.1 | 92.9 | 100.0 | 784 | 90.1 | 2.3 | 12.9 | 82.4 | 2.4 | 100.0 | 870 |
| Shiselweni | 8.9 | 91.1 | 100.0 | 438 | 71.2 | 1.4 | 11.0 | 79.0 | 8.6 | 100.0 | 615 |
| Lubombo | 5.5 | 94.5 | 100.0 | 474 | 82.0 | 1.6 | 9.1 | 87.7 | 1.6 | 100.0 | 577 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 11.5 | 88.5 | 100.0 | 189 | 71.8 | 1.6 | 16.4 | 76.1 | 5.9 | 100.0 | 263 |
| Lower primary | 6.7 | 93.3 | 100.0 | 180 | 73.7 | 1.1 | 10.5 | 78.9 | 9.4 | 100.0 | 245 |
| Higher primary | 7.4 | 92.6 | 100.0 | 574 | 76.8 | 2.6 | 11.6 | 82.6 | 3.2 | 100.0 | 748 |
| Secondary | 8.1 | 91.9 | 100.0 | 835 | 87.8 | 2.2 | 10.8 | 84.8 | 2.3 | 100.0 | 951 |
| High school | 7.8 | 92.2 | 100.0 | 432 | 94.5 | 1.3 | 14.3 | 82.7 | 1.7 | 100.0 | 457 |
| Tertiary | 4.2 | 95.8 | 100.0 | 158 | 95.0 | 0.0 | 8.2 | 90.3 | 1.6 | 100.0 | 166 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 6.2 | 93.8 | 100.0 | 384 | 67.1 | 1.8 | 10.0 | 79.6 | 8.6 | 100.0 | 572 |
| Second | 6.2 | 93.8 | 100.0 | 476 | 78.8 | 1.0 | 13.9 | 81.6 | 3.4 | 100.0 | 603 |
| Middle | 7.4 | 92.6 | 100.0 | 485 | 87.6 | 2.1 | 10.0 | 85.8 | 2.1 | 100.0 | 554 |
| Fourth | 9.5 | 90.5 | 100.0 | 514 | 92.8 | 1.8 | 13.0 | 84.1 | 1.2 | 100.0 | 554 |
| Highest | 9.1 | 90.9 | 100.0 | 509 | 93.1 | 2.9 | 12.4 | 83.5 | 1.2 | 100.0 | 546 |
| Total | 7.8 | 92.2 | 100.0 | 2,368 | 83.7 | 1.9 | 11.9 | 82.9 | 3.3 | 100.0 | 2,829 |

[^9]
### 10.2.2 Level and Trend in Vaccination Coverage

According to the guidelines developed by the World Health Organization, children are considered fully vaccinated when they have received by the age of 12 months a vaccination against tuberculosis (BCG); three doses of the diphtheria, pertussis (whooping cough), and tetanus (DPT) vaccine; three doses of the poliomyelitis (polio) vaccine; and one dose of the measles vaccine. BCG should be given at birth or at first clinical contact, DPT and polio require three vaccinations at approximately 6,10 , and 14 weeks of age, and measles should be given at or soon after reaching 9 months of age. In addition to this basic schedule of vaccinations, it is also recommended that babies in Swaziland be given a polio vaccination at the time of birth and three doses of the hepatitis B vaccine before reaching their first birthday.

Table 10.2 shows the percentage of children who have received the various vaccinations by source of information, that is, from a health card or mother's report. In order to focus on recent coverage levels, the table is restricted to children 12-23 months of age who are the youngest cohort of children to have reached the age by which they should be fully vaccinated.

| Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by 12 months of age, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Source of information | BCG | DPT |  |  | Polio ${ }^{1}$ |  |  |  | Hepatitis B |  |  | Measles | All basic vaccinations ${ }^{2}$ | No vaccinations | Number of children |
|  |  | 1 | 2 | 3 | 0 | 1 | 2 | 3 | 1 | 2 | 3 |  |  |  |  |
| Vaccinated at any time before survey |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Health card | 83.9 | 83.7 | 83.7 | 82.4 | 83.8 | 83.9 | 83.9 | 82.9 | 83.1 | 83.1 | 82.1 | 79.4 | 78.3 | 0.0 | 447 |
| Mother's report | 13.3 | 12.2 | 10.7 | 9.2 | 9.2 | 13.0 | 11.3 | 4.4 | 12.4 | 11.5 | 9.0 | 12.1 | 3.4 | 2.5 | 84 |
| Either source | 97.2 | 96.0 | 94.5 | 91.7 | 93.1 | 97.0 | 95.2 | 87.3 | 95.5 | 94.6 | 91.1 | 91.5 | 81.7 | 2.5 | 531 |
| Vaccinated by 12 months of age ${ }^{3}$ | 97.0 | 95.4 | 93.8 | 90.2 | 92.8 | 96.3 | 94.6 | 85.9 | 95.2 | 94.0 | 89.6 | 82.7 | 73.7 | 2.9 | 531 |
| ${ }^{1}$ Polio 0 is the polio vaccination given at birth. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{2}$ BCG, measles, and <br> ${ }^{3}$ For children whose be the same as for ch | doses | each of | DPT | nd poli | vaccin | port, the | prop | vaccion of | given | birth) | duri | the first | year of life | e was | sumed to |

Taking into account both the information on the child's health card and the mothers' report, the results in Table 10.2 indicate that 82 percent of children age 12-23 months received all recommended vaccinations, that is, a BCG and measles vaccination and three doses of the DPT and polio vaccines, at some point before the survey interview. Only 3 percent of the children had never been vaccinated against any of these childhood illnesses at the time of the SDHS. As Figure 10.1 shows, the proportion of children age 12-23 months fully immunised at the time of the SDHS was 17 percentage points higher than the rate ( 65 percent) prevailing at the time of the 2000 MICS survey (CSO, nd).

Figure 10.1 Trend in Vaccination Coverage


Looking at specific vaccines, BCG coverage among children age 12-23 months was nearly universal ( 97 percent) at the time of the SDHS. Coverage levels were also very high for the first DPT (96 percent) and polio doses ( 97 percent). The proportions of children receiving subsequent doses of the DPT and polio vaccines dropped off slightly, with 92 percent of children receiving the third DPT and 87 percent the third dose of polio. However, these rates were considerably higher than the rates observed in 2000, when only 78 percent of children had received the third DPT dose and 76 percent had received the third dose of polio (Figure 10.1). Ninety-two percent of children had received a measles vaccination at the time of the SDHS compared with 78 percent of children in 2000.

Table 10.2 also shows that 93 percent of children received a polio vaccination at birth. Ninety-six percent of children age 12-23 months have received the first hepatitis B vaccination and 91 percent have been given the third dose.

### 10.2.3 Vaccination Coverage by Background Characteristics

Table 10.3 presents vaccination coverage based on health card information and mothers' reports among children age 12-23 months by selected background characteristics. Caution should be exercised when interpreting these results since the number of children in some subgroups shown in the table is small and the differentials across subgroups are generally not large.

Table 10.3 shows that the proportion of children who are fully immunised increases with the child's birth order. Somewhat surprisingly, urban children are less likely to be fully immunised (78 percent) than rural children ( 83 percent). Also surprising is the fact that coverage levels are relatively low among children in the highest wealth quintile compared with other children. Considering the regional patterns, full vaccination coverage is lowest in Lubombo (76 percent) and highest in Hhohho (84 percent).

Table 10.3 Vaccinations by background characteristics
Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a health card or the mother's report), and percentage with a vaccination card, by background characteristics, Swaziland 2006-07

|  | BCG | DPT |  |  | Polio ${ }^{1}$ |  |  |  | Hepatitis B |  |  | Measles | All basic vaccinations |  | Percentage with health card seen | Number <br> of <br> children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 0 | 1 | 2 | 3 | 1 | 2 | 3 |  |  |  |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 97.1 | 96.7 | 95.7 | 93.4 | 92.9 | 96.8 | 95.6 | 87.7 | 96.4 | 95.3 | 92.0 | 91.5 | 81.8 | 2.4 | 84.2 | 272 |
| Female | 97.3 | 95.2 | 93.2 | 89.9 | 93.2 | 97.1 | 94.7 | 86.9 | 94.6 | 93.9 | 90.2 | 91.5 | 81.7 | 2.6 | 84.0 | 259 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 96.6 | 96.1 | 93.3 | 91.0 | 90.4 | 96.9 | 94.0 | 84.6 | 95.5 | 94.0 | 89.6 | 92.3 | 79.4 | 2.6 | 78.5 | 185 |
| 2-3 | 96.4 | 94.1 | 92.6 | 89.7 | 92.3 | 95.5 | 93.6 | 85.2 | 94.1 | 93.0 | 90.0 | 92.9 | 82.1 | 3.4 | 81.8 | 189 |
| 4-5 | 98.9 | 97.8 | 97.8 | 92.6 | 96.2 | 98.9 | 98.5 | 89.9 | 96.5 | 96.5 | 91.5 | 87.0 | 79.3 | 1.1 | 91.7 | 96 |
| 6+ | 98.6 | 98.6 | 98.6 | 98.6 | 98.6 | 98.6 | 98.6 | 98.0 | 98.6 | 98.6 | 98.6 | 92.1 | 91.5 | 1.4 | 96.3 | 61 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 96.6 | 96.4 | 94.3 | 90.8 | 94.6 | 97.0 | 94.2 | 79.3 | 94.8 | 94.0 | 91.5 | 94.8 | 77.7 | 2.7 | 75.3 | 103 |
| Rural | 97.3 | 95.9 | 94.5 | 91.9 | 92.7 | 96.9 | 95.4 | 89.2 | 95.7 | 94.7 | 91.0 | 90.7 | 82.7 | 2.4 | 86.2 | 428 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 97.2 | 95.9 | 94.5 | 93.1 | 94.5 | 97.2 | 96.6 | 89.3 | 95.9 | 95.9 | 93.1 | 93.7 | 84.3 | 2.8 | 86.8 | 149 |
| Manzini | 96.6 | 95.4 | 95.1 | 93.3 | 93.2 | 97.3 | 94.4 | 88.4 | 95.7 | 94.6 | 92.6 | 90.5 | 81.9 | 2.7 | 84.5 | 162 |
| Shiselweni | 97.2 | 96.7 | 96.7 | 92.6 | 93.3 | 97.6 | 96.6 | 87.5 | 95.2 | 95.2 | 92.4 | 91.6 | 83.7 | 2.4 | 83.5 | 111 |
| Lubombo | 97.9 | 96.2 | 91.2 | 86.4 | 90.7 | 95.4 | 93.0 | 82.8 | 95.2 | 92.2 | 84.8 | 90.0 | 76.1 | 1.8 | 80.5 | 110 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | (95.2) | (93.1) | (91.4) | (90.5) | (93.0) | (91.4) | (90.5) | (85.2) | (93.1) | (91.4) | (89.5) | (84.4) | (76.5) | (4.8) | (80.8) | 44 |
| Lower primary | 93.7 | 95.8 | 94.3 | 87.7 | 90.4 | 95.8 | 95.8 | 89.0 | 93.7 | 93.7 | 87.7 | 84.5 | 77.7 | 4.2 | 91.4 | 51 |
| Higher primary | 99.1 | 96.9 | 94.5 | 90.5 | 90.7 | 98.4 | 96.8 | 87.0 | 95.5 | 92.9 | 87.8 | 92.3 | 80.8 | 0.9 | 81.4 | 145 |
| Secondary | 97.0 | 95.1 | 94.5 | 93.8 | 94.2 | 97.2 | 94.3 | 89.0 | 95.5 | 95.5 | 93.5 | 91.9 | 83.8 | 2.6 | 85.9 | 175 |
| High school | 97.7 | 97.7 | $95.7$ | 93.3 | 97.1 | 97.7 | $97.6$ | $85.0$ | 97.7 | 97.7 | 94.1 | 95.8 | 83.1 | 2.3 | 85.3 | 88 |
| Tertiary | (96.4) | (96.4) | (94.8) | (89.0) | (90.7) | (96.4) | (91.0) | (86.1) | (96.4) | (94.5) | (92.9) | (95.2) | (84.8) | (3.6) | (75.7) | 29 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 97.2 | 96.4 | 93.5 | 91.7 | 93.4 | 97.3 | 96.3 | 90.4 | 94.4 | 94.4 | 89.8 | 89.4 | 82.3 | 1.8 | 89.1 | 108 |
| Second | 96.8 | 93.1 | 92.3 | 89.5 | 91.9 | 96.8 | 94.0 | 88.2 | 93.7 | 93.7 | 89.6 | 88.5 | 80.3 | 3.2 | 84.8 | 115 |
| Middle | 98.8 | 98.8 | 97.3 | 93.8 | 93.0 | 97.3 | 96.6 | 86.8 | 98.8 | 95.4 | 91.0 | 93.1 | 82.1 | 1.2 | 83.0 | 123 |
| Fourth | 98.0 | 97.0 | 97.0 | 94.4 | 93.9 | 98.0 | 96.9 | 89.2 | 95.7 | 95.4 | 94.3 | 94.3 | 85.6 | 2.0 | 85.5 | 95 |
| Highest | 94.7 | 94.2 | 91.7 | 88.8 | 93.2 | 95.2 | 91.7 | 81.1 | 94.7 | 94.0 | 91.3 | 92.9 | 78.5 | 4.5 | 77.3 | 90 |
| Total | 97.2 | 96.0 | 94.5 | 91.7 | 93.1 | 97.0 | 95.2 | 87.3 | 95.5 | 94.6 | 91.1 | 91.5 | 81.7 | 2.5 | 84.1 | 531 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Polio 0 is the polio vaccination given at birth.
${ }^{2}$ BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

### 10.3 Acute Respiratory Infection and Fever

The 2006-07 SDHS collected information on the prevalence and treatment of acute respiratory infection among young children. Acute respiratory infection (ARI) is one of the leading causes of childhood morbidity and mortality. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. In the 2006-07 SDHS, the prevalence of ARI was estimated by asking mothers whether their children under age five had been ill in the two weeks preceding the survey, with a cough accompanied by short, rapid breathing which the mother considered to be chest-related. These symptoms are compatible with ARI.

The SDHS also obtained information on the prevalence and treatment of fever. Fever is a symptom of malaria and other acute infections in children, and it is important that children with fever be evaluated promptly and treated appropriately. This section focuses on presenting basic information from the SDHS on the prevalence and treatment response to fever in young children. Additional information relevant to efforts in Swaziland to address the problem of malaria is discussed in Chapter 12.

Table 10.4 presents the proportions of children under five who were reported by their mother as experiencing fever or symptoms of ARI in the two weeks preceding the SDHS. When considering the information on ARI and fever prevalence, it should be remembered that the data are based on the mother's perception of illness without validation by medical personnel.

Overall, Table 10.4 shows that, in the two weeks prior to SDHS, eight children under age five experienced symptoms of ARI, and 28 percent had a fever. The likelihood that a child was ill either with the symptoms of an acute respiratory infection or fever during the period varies according to the child's age. The prevalence of ARI symptoms was highest among children age $6-35$ months ( 10 percent). The prevalence of fever peaked at 41 percent among children age 6-11 months, and then fell to around half that level among children age 36-59 months. There was only a small difference in the prevalence of ARI symptoms between boys and girls. Boys, however, were much more likely than girls to have a fever (31 percent and 24 percent, respectively).

Rural children were more likely than children in urban areas to have been ill with ARI symptoms or fever during the two weeks prior to the SDHS. Prevalence of both illnesses is substantially higher in Lubombo than in the other regions. Although not uniform, the likelihood that a child had been ill with ARI symptoms or fever also decreased with the mother's education level and the wealth quintile.

Figure 10.2 presents information on actions that were taken to treat ARI symptoms and fever

Table 10.4 Prevalence and treatment of fever and symptoms of ARI

Among children under age five, the percentage who had fever and who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey, according to background characteristics, Swaziland 2006-07

|  | Percentage <br> with <br> symptoms |
| :--- | :--- |
| Background | Percentage Number of |


| characteristic | of $\mathrm{ARI}^{1}$ | with fever | children |
| :--- | ---: | :---: | :---: |
| Age in months |  |  |  |
| $\quad<6$ | 6.6 | 28.7 | 265 |
| $6-11$ | 10.2 | 41.2 | 301 |
| $12-23$ | 9.8 | 35.0 | 531 |
| $24-35$ | 9.9 | 24.7 | 483 |
| $36-47$ | 6.2 | 20.5 | 492 |
| $48-59$ | 7.5 | 20.2 | 480 |

Sex

| Sex | 9.1 | 30.7 | 1,290 |
| :--- | :--- | :--- | :--- |
| Male | 7.7 | 24.3 | 1,263 |

## Residence

Urban
Rural
Region Hhohho
Manzini Shiselweni Lubombo

Mother's education

| No education | 11.5 | 33.5 | 232 |
| :--- | ---: | ---: | ---: |
| Lower primary | 7.0 | 33.3 | 224 |
| Higher primary | 11.3 | 31.7 | 668 |
| Secondary | 7.0 | 24.8 | 865 |
| High school | 7.1 | 26.5 | 405 |
| Tertiary | 4.3 | 10.9 | 159 |
| Wealth quintile |  |  |  |
| $\quad$ Lowest | 10.4 | 33.6 | 516 |
| Second | 10.8 | 31.8 | 556 |
| Middle | 5.0 | 25.6 | 501 |
| Fourth | 7.1 | 23.7 | 490 |
| Highest | 8.2 | 22.2 | 490 |
| Total | 8.4 | 27.5 | 2,553 |

${ }^{1}$ Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related) is considered a proxy for pneumonia. among young children. Among the children that showed ARI symptoms, 73 percent of them received medical attention and 24 percent received antibiotics. Around six in ten children with fever received medical attention. Seventeen percent of children with fever were given antibiotics, and 1 percent were treated with an antimalarial drug.

## Figure 10.2 Treatment Practises for Children III with the Symptoms of an Acute Respiratory Infection or a Fever



SDHS 2006-07

### 10.4 Diarrhoeal Disease

Dehydration caused by severe diarrhoea is a major cause of morbidity and mortality among young children. Exposure to diarrhoea-causing agents is frequently related to the use of contaminated water and to unhygienic practises in food preparation and disposal of excreta.

### 10.4.1 Prevalence of Diarrhoea

Table 10.5 shows the percentage of children under five with diarrhoea and with diarrhoea with blood in the faeces in the two weeks preceding the survey, according to selected background characteristics. Blood in the faeces is a sign of dysentery. In interpreting the findings in Table 10.5, it should be borne in mind that prevalence of diarrhoea varies seasonally; the highest prevalence is observed in September through March during the rainy season. It is also important to recognize that the data are based on the mother's subjective assessment of the child's illness and, thus, may involve reporting error.

Among children under age five, the prevalence of diarrhoea was 13 percent, and 3 percent had diarrhoea with blood. Diarrhoeal illness is more common among children age 6-11 months (27 percent) and children age 12-23 months ( 22 percent) than among younger or older children. Additionally, diarrhoea prevalence is higher among male children, children living in households with an unimproved drinking water source or non-improved or shared toilet facilities, children from rural areas and from the Lubombo region, children whose mothers have less than a secondary education, and children in the lowest wealth quintile.

| Table 10.5 Prevalence of diarrhoea |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of children under age five who had diarrhoea in the two weeks preceding the survey, by background characteristics, Swaziland 2006-07 |  |  |  |
| Diarrhoea in the two weeks preceding the survey |  |  |  |
| Background characteristic | All diarrhoea | Diarrhoea with blood | Number of children |
| Age in months |  |  |  |
| <6 | 10.8 | 0.7 | 265 |
| 6-11 | 27.3 | 4.5 | 301 |
| 12-23 | 21.9 | 5.2 | 531 |
| 24-35 | 13.7 | 3.6 | 483 |
| 36-47 | 5.2 | 1.5 | 492 |
| 48-59 | 5.0 | 2.3 | 480 |
| Sex |  |  |  |
| Male | 15.5 | 3.3 | 1,290 |
| Female | 11.3 | 2.9 | 1,263 |
| Source of drinking water ${ }^{1}$ |  |  |  |
| Improved | 11.4 | 2.6 | 1,655 |
| Not improved | 17.2 | 4.0 | 898 |
| Toilet facility ${ }^{2}$ |  |  |  |
| Improved, not shared | 11.4 | 2.8 | 1,306 |
| Non-improved or shared | 15.6 | 3.4 | 1,242 |
| Residence |  |  |  |
| Urban | 9.3 | 1.8 | 557 |
| Rural | 14.6 | 3.5 | 1,996 |
| Region |  |  |  |
| Hhohho | 11.0 | 1.6 | 694 |
| Manzini | 12.3 | 2.3 | 784 |
| Shiselweni | 14.4 | 5.1 | 558 |
| Lubombo | 17.4 | 4.1 | 517 |
| Education |  |  |  |
| No education | 16.1 | 4.0 | 232 |
| Lower primary | 17.1 | 4.7 | 224 |
| Higher primary | 16.0 | 3.9 | 668 |
| Secondary | 11.7 | 2.6 | 865 |
| High school | 13.6 | 2.8 | 405 |
| Tertiary | 2.8 | 0.0 | 159 |
| Wealth quintile |  |  |  |
| Lowest | 23.0 | 5.3 | 516 |
| Second | 11.2 | 3.1 | 556 |
| Middle | 13.6 | 3.1 | 501 |
| Fourth | 10.3 | 3.0 | 490 |
| Highest | 8.9 | 0.9 | 490 |
| Total | 13.4 | 3.1 | 2,553 |
| Note: Total includes five births with information missing on toilet facility. <br> ${ }^{1}$ See Table 2.6 for definition of categories. <br> ${ }^{2}$ See Table 2.7 for definition of categories. |  |  |  |

### 10.4.2 Treatment of Diarrhoea

To obtain some insight into whether or not diarrhoeal illnesses are being treated appropriately, mothers of children who had diarrhoea in the two weeks before the SDHS were asked about what was done to treat the illness. Table 10.6 provides information on a number of actions that mothers reported were taken when their child was ill.

The results in Table 10.6 indicate that health care providers are consulted in the majority of cases of diarrhoeal illness among young children. Seventy-two percent of the children who had diarrhoea were taken to a health provider for treatment.

A simple and effective response to dehydration caused by diarrhoea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy (ORT). Table 10.6 shows that 89 percent of children ill with diarrhoea were given a solution prepared from an oral rehydration salts (ORS) packet or a homemade mixture usually prepared from sugar, salt, and water that is recommended to treat the diarrhoea. Ninety-one percent were treated with some form of ORT or increased fluids.

| Table 10.6 Diarrhoea treatment |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among children under age five who had diarrhoea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage who were given other treatments, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Percentage of children with |  | Oral rehy | dration th | erapy (ORT) |  |  |  | her treatm | nents |  |  |  |
| Background characteristic | diarrhoea taken to a health facility or provider ${ }^{1}$ | ORS packets | Recommended home fluids (RHF) ${ }^{2}$ | Either ORS or RHF | Increased fluids | ORT or increased fluids | Antibiotic drugs | Antimotility drugs | $\begin{gathered} \text { Vitamin } \\ \text { A } \\ \hline \end{gathered}$ | Other/ unknown pill, syrup, or injection | Home remedy/ other | $\qquad$ | Number of children |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | (53.9) | (78.9) | (4.2) | (82.8) | (18.2) | (82.8) | (7.4) | (0.0) | (0.0) | (20.8) | (7.9) | (16.0) | 29 |
| 6-11 | 83.1 | 88.3 | 18.3 | 91.0 | 22.4 | 91.6 | 21.0 | 1.0 | 1.1 | 36.8 | 7.5 | 4.5 | 82 |
| 12-23 | 72.8 | 85.0 | 16.9 | 87.2 | 25.8 | 90.0 | 20.5 | 2.6 | 1.2 | 33.8 | 9.5 | 6.1 | 116 |
| 24-35 | 69.5 | 86.6 | 25.0 | 90.4 | 32.5 | 92.0 | 18.2 | 0.0 | 1.8 | 44.0 | 2.7 | 2.8 | 66 |
| 36-47 | (61.9) | (78.3) | (29.6) | (86.7) | (33.7) | (91.1) | (15.0) | (0.0) | (0.0) | (17.0) | (3.8) | (8.9) | 25 |
| 48-59 | (68.3) | (90.7) | (31.4) | (94.2) | (25.8) | (94.2) | (14.5) | (0.0) | (4.1) | (33.5) | (12.6) | (5.8) | 24 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 69.5 | 85.9 | 18.7 | 87.8 | 26.6 | 89.4 | 16.6 | 1.0 | 1.7 | 32.5 | 6.2 | 6.1 | 201 |
| Female | 75.4 | 85.0 | 21.1 | 90.3 | 25.7 | 92.1 | 20.6 | 1.3 | 0.8 | 36.4 | 9.0 | 6.2 | 143 |
| Type of diarrhoea |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Non bloody | 70.3 | 84.4 | 18.6 | 88.2 | 24.7 | 89.8 | 17.3 | 1.5 | 0.9 | 35.0 | 7.5 | 6.2 | 259 |
| Bloody | 80.4 | 89.7 | 24.2 | 91.9 | 30.5 | 94.1 | 22.3 | 0.0 | 2.6 | 33.2 | 7.3 | 4.7 | 79 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 66.7 | 78.5 | 13.7 | 81.2 | 35.7 | 84.0 | 25.6 | 0.0 | 2.5 | 32.3 | 3.5 | 8.6 | 52 |
| Rural | 72.9 | 86.7 | 20.7 | 90.2 | 24.5 | 91.7 | 16.9 | 1.3 | 1.1 | 34.4 | 8.0 | 5.7 | 292 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 66.8 | 86.5 | 11.6 | 87.7 | 25.1 | 89.1 | 8.4 | 1.4 | 1.4 | 27.1 | 4.7 | 10.9 | 77 |
| Manzini | 71.4 | 82.8 | 22.7 | 88.3 | 24.0 | 90.7 | 29.3 | 1.0 | 0.0 | 24.7 | 7.0 | 4.6 | 96 |
| Shiselweni | 70.8 | 87.0 | 29.5 | 91.7 | 29.4 | 93.5 | 13.1 | 0.0 | 0.0 | 49.7 | 9.3 | 3.9 | 81 |
| Lubombo | 77.9 | 86.2 | 14.5 | 87.7 | 26.6 | 89.0 | 19.4 | 2.0 | 3.8 | 36.2 | 8.4 | 5.7 | 90 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education/lower primary ${ }^{3}$ | 70.0 | 88.7 | 14.7 | 93.2 | 33.0 | 93.6 | 17.9 | 0.0 | 2.5 | 29.2 | 9.9 | 5.1 | 76 |
| Higher primary | 71.3 | 82.0 | 23.4 | 86.6 | 27.0 | 88.2 | 14.1 | 1.7 | 1.1 | 35.7 | 8.8 | 6.4 | 107 |
| Secondary | 79.9 | 85.6 | 21.4 | 86.9 | 19.4 | 89.6 | 20.7 | 0.0 | 0.4 | 34.8 | 7.5 | 7.7 | 101 |
| High school/tertiary ${ }^{3}$ | 62.0 | 87.4 | 16.3 | 90.5 | 27.9 | 92.5 | 22.1 | 3.4 | 1.8 | 36.3 | 1.4 | 4.2 | 59 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 71.6 | 84.4 | 18.2 | 88.5 | 22.4 | 89.4 | 11.8 | 0.0 | 1.8 | 34.6 | 12.2 | 8.6 | 119 |
| Second | 75.2 | 90.0 | 21.1 | 95.5 | 35.7 | 96.0 | 20.6 | 2.9 | 0.0 | 33.2 | 9.7 | 2.4 | 62 |
| Middle | 77.5 | 90.8 | 28.7 | 91.9 | 23.3 | 93.5 | 22.1 | 1.6 | 1.6 | 42.1 | 4.9 | 3.4 | 68 |
| Fourth | 72.8 | 81.0 | 18.2 | 82.8 | 25.3 | 87.4 | 17.7 | 1.9 | 0.7 | 31.1 | 0.0 | 7.8 | 50 |
| Highest | (58.4) | (79.0) | (9.1) | (82.3) | (28.6) | (84.8) | (27.0) | (0.0) | (2.1) | (25.1) | (3.3) | (6.6) | 43 |
| Total | 71.9 | 85.5 | 19.7 | 88.8 | 26.2 | 90.6 | 18.2 | 1.1 | 1.3 | 34.1 | 7.4 | 6.1 | 343 |
| Note: ORT includes solution prepared from oral rehydration salt (ORS) and recommended home fluids (RHF). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ Excludes pharmacy, shop, and traditional practitioner <br> ${ }^{2}$ The recommended home fluids are the sugar-salt-solutions (SSS). <br> ${ }^{3}$ Education levels were combined due to the small number of cases. |  |  |  |  |  |  |  |  |  |  |  |  |  |

Antibiotics and other medications are generally not recommended for use in treating diarrhoea among young children. However, Table 10.6 shows that antibiotics were given to 18 percent of the children with diarrhoea, and 34 percent were given other drugs. Seven percent received various home remedies. Only 6 percent of the children with diarrhoea were not taken to a health provider or given any treatment.

Table 10.6 also provides information on differences in consultation and treatment practices when a child had diarrhoea across population subgroups. Consultations with health providers were most frequent when the child was $6-11$ months of age ( 83 percent) and had bloody stools ( 80 percent). The lowest levels of ORT usage were in urban areas ( 81 percent) and the fourth and fifth wealth quintiles (83 percent and 81 percent, respectively). The low rate of urban ORT use is offset partially by the fact that urban mothers were more likely than rural mothers to increase the fluids children with diarrhoea were given. The highest level of use of antibiotics was reported in the Manzini region.

### 10.4.3 Feeding Practices

Mothers are encouraged to continue feeding children with diarrhoea normally and to increase the amount of fluids. These practises are promoted to reduce dehydration and minimize the adverse consequences of diarrhoea on the child's nutritional status.

To assess changes in feeding practices, if any, mothers of children who had diarrhoea during the two weeks before the SDHS were asked whether they gave the child less, the same amount, or more fluids and food than usual when their child was ill. Table 10.7 shows the percent distribution of children under five who had diarrhoea by feeding practices, according to background characteristics. Twenty-six percent of the children who had diarrhoea in the two weeks preceding the survey were offered increased fluids. In the case of 55 percent of the children, mothers continued to feed the child either the same or more food compared with their normal amount or fed the child only somewhat less than the normal amount. The proportion of children whose mothers reported they both increased fluids given to the child and continued feeding is relatively low (15 percent). However, around nine in ten children either received some form of ORT or were given increased fluids and continued feeding.

## Table 10.7 Feeding practices during diarrhoea

Percent distribution of children under age five who had diarrhoea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, the percentage of children given increased fluids and continued feeding during the diarrhoea episode, and the percentage of children who continued feeding and were given ORT and/or increased fluids during the episode of diarrhoea, by background characteristics, Swaziland 2006-07

| Background characteristic | Amount of liquids offered |  |  |  |  |  | Total | Amount of food offered |  |  |  |  |  | Total | Percentage given increased fluids and continued feeding ${ }^{1,2}$ | Percentage given ORT or increased fluids and continued feeding ${ }^{3}$ | Number of children with$\qquad$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | More | $\begin{gathered} \text { Same } \\ \text { as } \\ \text { usual } \end{gathered}$ | Somewhat less | Much less | None | Don't know/ missing |  | More | $\begin{gathered} \text { Same } \\ \text { as } \\ \text { usual } \end{gathered}$ | Somewhat less | Much less | None | Never gave food |  |  |  |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | (18.2) | (42.0) | (25.4) | (10.2) | (4.2) | (0.0) | 100.0 | (7.2) | (19.4) | (19.0) | (14.9) | (8.0) | (31.4) | 100.0 | (11.1) | (82.8) | 29 |
| 6-11 | 22.4 | 27.4 | 32.7 | 14.7 | 2.8 | 0.0 | 100.0 | 3.9 | 13.4 | 27.8 | 20.2 | 27.2 | 7.4 | 100.0 | 9.8 | 91.6 | 82 |
| 12-23 | 25.8 | 33.8 | 27.2 | 11.4 | 1.5 | 0.3 | 100.0 | 2.7 | 21.4 | 32.6 | 23.9 | 16.3 | 3.0 | 100.0 | 15.7 | 90.0 | 116 |
| 24-35 | 32.5 | 43.0 | 12.4 | 9.1 | 0.0 | 3.0 | 100.0 | 8.1 | 20.8 | 33.8 | 21.4 | 15.9 | 0.0 | 100.0 | 20.7 | 92.0 | 66 |
| 36-47 | (33.7) | (38.6) | (17.1) | (7.5) | (0.0) | (3.1) | 100.0 | (4.3) | (25.2) | (38.7) | (15.3) | (16.5) | (0.0) | 100.0 | (17.4) | (91.1) | 25 |
| 48-59 | * | * | * | * | * | * | 100.0 | * | * | * | * | * | * | 100.0 | * | * | 24 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 26.6 | 36.7 | 23.1 | 12.5 | 0.9 | 0.2 | 100.0 | 5.1 | 20.6 | 32.3 | 20.2 | 15.6 | 6.1 | 100.0 | 16.9 | 89.4 | 201 |
| Female | 25.7 | 31.2 | 28.4 | 8.6 | 3.5 | 2.6 | 100.0 | 3.3 | 18.2 | 29.9 | 21.7 | 21.7 | 5.1 | 100.0 | 12.2 | 92.1 | 143 |
| Type of diarrhoea |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Non bloody | 24.7 | 35.1 | 24.8 | 12.1 | 2.0 | 1.4 | 100.0 | 5.5 | 20.0 | 32.4 | 20.7 | 14.6 | 6.8 | 100.0 | 15.0 | 89.8 | 259 |
| Bloody | 30.5 | 32.8 | 28.6 | 6.0 | 2.1 | 0.0 | 100.0 | 0.8 | 19.7 | 27.5 | 21.2 | 28.4 | 2.4 | 100.0 | 14.2 | 94.1 | 79 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 35.7 | 29.3 | 19.6 | 13.9 | 0.7 | 0.7 | 100.0 | 4.0 | 23.3 | 24.6 | 26.7 | 16.9 | 4.5 | 100.0 | 17.0 | 84.0 | 52 |
| Rural | 24.5 | 35.3 | 26.3 | 10.3 | 2.2 | 1.3 | 100.0 | 4.4 | 19.0 | 32.5 | 19.8 | 18.3 | 5.9 | 100.0 | 14.6 | 91.7 | 292 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 25.1 | 33.3 | 27.1 | 10.8 | 1.1 | 2.6 | 100.0 | 7.1 | 19.9 | 25.9 | 22.0 | 21.3 | 3.9 | 100.0 | 14.9 | 89.1 | 77 |
| Manzini | 24.0 | 41.4 | 23.5 | 9.5 | 1.2 | 0.4 | 100.0 | 5.7 | 25.5 | 32.6 | 21.2 | 15.0 | 0.0 | 100.0 | 14.7 | 90.7 | 96 |
| Shiselweni | 29.4 | 28.0 | 31.4 | 9.2 | 2.1 | 0.0 | 100.0 | 1.0 | 17.1 | 35.7 | 19.3 | 15.0 | 12.0 | 100.0 | 20.2 | 93.5 | 81 |
| Lubombo | 26.6 | 33.6 | 20.3 | 13.9 | 3.6 | 1.9 | 100.0 | 3.6 | 15.4 | 30.6 | 20.9 | 21.7 | 7.7 | 100.0 | 10.5 | 89.0 | 90 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education/ Lower primary ${ }^{4}$ | 33.0 | 18.6 | 30.2 | 14.6 | 2.6 | 1.0 | 100.0 | 2.4 | 15.8 | 32.2 | 22.1 | 20.9 | 6.6 | 100.0 | 21.8 | 93.6 | 76 |
| Higher primary | 27.0 | 39.9 | 23.2 | 6.4 | 3.5 | 0.0 | 100.0 | 2.5 | 18.7 | 26.8 | 26.6 | 20.3 | 5.1 | 100.0 | 13.5 | 88.2 | 107 |
| Secondary | 19.4 | 41.5 | 22.1 | 14.5 | 1.2 | 1.3 | 100.0 | 4.6 | 20.0 | 32.9 | 16.7 | 18.2 | 7.5 | 100.0 | 11.9 | 89.6 | 101 |
| High school/ tertiary ${ }^{4}$ | 27.9 | 32.5 | 28.3 | 8.0 | 0.0 | 3.4 | 100.0 | 9.7 | 25.7 | 35.6 | 16.0 | 10.6 | 2.5 | 100.0 | 14.0 | 92.5 | 59 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 22.4 | 35.4 | 30.1 | 10.1 | 1.4 | 0.7 | 100.0 | 2.3 | 15.2 | 30.7 | 22.4 | 19.1 | 10.3 | 100.0 | 15.1 | 89.4 | 119 |
| Second | 35.7 | 31.0 | 19.2 | 9.1 | 3.5 | 1.5 | 100.0 | 6.9 | 21.5 | 31.3 | 13.7 | 23.7 | 2.9 | 100.0 | 21.2 | 96.0 | 62 |
| Middle | 23.3 | 31.0 | 25.7 | 16.8 | 2.7 | 0.5 | 100.0 | 3.7 | 17.7 | 37.1 | 25.7 | 13.5 | 2.5 | 100.0 | 8.3 | 93.5 | 68 |
| Fourth | 25.3 | 47.3 | 21.5 | 4.2 | 1.7 | 0.0 | 100.0 | 6.6 | 25.3 | 32.3 | 23.9 | 11.8 | 0.0 | 100.0 | 17.3 | 87.4 | 50 |
| Highest | (28.6) | (27.3) | (24.8) | (14.0) | (0.8) | (4.6) | 100.0 | (5.0) | (25.7) | (22.8) | (15.5) | (22.0) | (9.0) | 100.0 | (13.2) | (84.8) | 43 |
| Total | 26.2 | 34.4 | 25.3 | 10.9 | 2.0 | 1.2 | 100.0 | 4.4 | 19.6 | 31.3 | 20.9 | 18.1 | 5.7 | 100.0 | 14.9 | 90.6 | 343 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed
Equivalent to the UNICEF/WHO indicator "Home management of diarrhoea." MICS Indicator 34
${ }^{2}$ Continued feeding practises includes children who were given more, same as usual, or somewhat less food during the diarrhoea episode.
Equivalent to UNICEF MICS Indicator 35
Equivalent to UNICEF MICS Indicator 35 .

### 10.5 Knowledge of ORS Packets

As discussed above, a solution prepared from ORS packets is very effective in preventing dehydration when a child has diarrhoea. To ascertain how widespread knowledge of ORS is in Swaziland, mothers who gave birth during the five years before the SDHS were asked whether they know about oral rehydration salts (ORS). Table 10.8 shows that nearly all mothers (98 percent) know about ORS packets. This suggests that the health education campaign around issues of diarrhoea has been very successful.

### 10.6 Stool Disposal

If human faeces are left uncontained, disease may spread by direct contact or by animal contact with the faeces. Hence, the proper disposal of children's stools is extremely important in preventing the spread of disease. Table 10.9 presents information on the disposal of the stools of the youngest living child under age five, by background characteristics. Stools are disposed of appropriately for nearly two-thirds of children. However, stools are left in the open in the case of one-fifth of children, and they were dumped into a ditch or drain or thrown in the garbage in the case of 14 percent of the children.

The older the child the greater is the likelihood that the child's stools will be disposed of safely. As expected, households with non-improved or shared toilet facilities are less likely than those with improved and non-shared facilities to safely dispose of children's stools ( 53 percent and 76 percent, respectively). Given the fact that urban households have better sanitation facilities than rural areas, it is not surprising that the percentage of children whose stools were safely disposed of is substantially higher in urban areas (80 percent) than in rural areas ( 62 percent). Safe stool disposal practises are reported least often in the Lubombo region ( 55 percent) and most often in Manzini ( 73 percent). The likelihood of safe stool disposal practises increases with the educational status of the mothers and the wealth quintile.

## Table 10.9 Disposal of children's stools

Percent distribution of youngest children under age five living with the mother by the manner of disposal of the child's last faecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Swaziland 2006-07

| Background characteristic | Manner of disposal of children's stools |  |  |  |  |  |  |  | Percentage of children whose stools are disposed of safely ${ }^{1}$ | Number of mothers |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Child used toilet or latrine | Put/rinsed into toilet or latrine | Buried | Put/rinsed into drain or ditch | Thrown into garbage | Left in the open | Missing | Total |  |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |
| <6 | 5.1 | 44.5 | 2.4 | 18.7 | 10.3 | 18.0 | 0.9 | 100.0 | 52.0 | 260 |
| 6-11 | 5.7 | 50.8 | 3.7 | 15.5 | 6.8 | 17.2 | 0.3 | 100.0 | 60.1 | 292 |
| 12-23 | 9.4 | 49.0 | 7.9 | 7.5 | 7.3 | 18.0 | 0.9 | 100.0 | 66.3 | 476 |
| 24-35 | 17.1 | 41.9 | 10.7 | 3.1 | 2.9 | 23.0 | 1.4 | 100.0 | 69.7 | 324 |
| 36-47 | 32.8 | 30.2 | 6.9 | 2.1 | 2.2 | 23.7 | 2.0 | 100.0 | 69.9 | 274 |
| 48-59 | 47.7 | 23.2 | 4.7 | 2.7 | 1.1 | 17.7 | 2.9 | 100.0 | 75.6 | 179 |
| Toilet facility |  |  |  |  |  |  |  |  |  |  |
| Improved, not shared ${ }^{2}$ | 22.4 | 48.6 | 5.1 | 6.2 | 5.2 | 11.1 | 1.4 | 100.0 | 76.1 | 951 |
| Non-improved or shared | 10.6 | 34.5 | 8.0 | 10.7 | 5.9 | 29.2 | 1.2 | 100.0 | 53.1 | 851 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 27.0 | 52.7 | 0.5 | 7.8 | 5.7 | 4.2 | 2.1 | 100.0 | 80.2 | 357 |
| Rural | 14.4 | 39.3 | 7.9 | 8.4 | 5.4 | 23.4 | 1.1 | 100.0 | 61.6 | 1,449 |

## Region

| Hhohho | 18.7 | 40.4 | 5.5 | 11.7 | 5.5 | 16.5 | 1.7 | 100.0 | 64.6 | 486 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Manzini | 15.6 | 52.2 | 5.5 | 5.2 | 5.0 | 15.3 | 1.2 | 100.0 | 73.3 | 545 |
| Shiselweni | 19.8 | 37.5 | 7.6 | 9.1 | 5.4 | 20.3 | 0.5 | 100.0 | 64.8 | 409 |
| Lubombo | 13.2 | 33.9 | 7.8 | 7.5 | 6.3 | 29.5 | 1.8 | 100.0 | 54.8 | 366 |


| Mother's education |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No education | 9.8 | 29.0 | 9.3 | 5.9 | 7.1 | 35.3 | 3.6 | 100.0 | 48.1 | 157 |
| Lower primary | 13.0 | 28.2 | 11.7 | 10.0 | 4.6 | 30.6 | 2.0 | 100.0 | 52.8 | 157 |
| Higher primary | 14.2 | 40.2 | 7.4 | 8.3 | 5.3 | 24.1 | 0.5 | 100.0 | 61.8 | 473 |
| Secondary | 16.4 | 47.2 | 6.0 | 8.7 | 4.0 | 16.3 | 1.3 | 100.0 | 69.7 | 601 |
| High school | 20.0 | 47.9 | 3.7 | 9.2 | 6.0 | 11.8 | 1.3 | 100.0 | 71.7 | 300 |
| Tertiary | 37.0 | 42.5 | 0.9 | 5.2 | 11.2 | 3.0 | 0.3 | 100.0 | 80.3 | 118 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 6.4 | 24.6 | 11.0 | 11.0 | 8.4 | 37.2 | 1.3 | 100.0 | 42.0 | 374 |
| Second | 15.0 | 40.0 | 7.2 | 7.2 | 5.8 | 24.0 | 0.7 | 100.0 | 62.2 | 388 |
| Middle | 15.2 | 45.0 | 6.1 | 10.7 | 3.6 | 18.0 | 1.3 | 100.0 | 66.3 | 364 |
| Fourth | 19.6 | 51.9 | 6.2 | 5.6 | 2.9 | 13.2 | 0.6 | 100.0 | 77.7 | 353 |
| Highest | 30.1 | 50.1 | 1.0 | 6.8 | 6.5 | 2.9 | 2.6 | 100.0 | 81.2 | 326 |
| Total | 16.9 | 42.0 | 6.4 | 8.3 | 5.5 | 19.6 | 1.3 | 100.0 | 65.3 | 1,806 |

[^10]
## NUTRITION OF CHILDREN AND ADULTS

## Nelisiwe Sikhosana

This chapter first considers information from the 2006-07 SDHS relating to children's nutrition. Anthropometric measures of the nutritional status for children under age five are presented first. Breastfeeding and infant and young child feeding practices (IYCF) are then described. Data on anaemia prevalence among children under age 15 are reviewed. The chapter also looks at several summary indicators relating to micronutrient intake and supplementation among children under age five. The chapter next addresses questions relating to the nutritional status of adults including the prevalence of malnutrition and anaemia. The chapter also presents information for mothers of young children on the diversity of foods consumed during the 24 -hour period before the survey and on micronutrient intake and supplementation among childbearing women.

### 11.1 Nutritional Status of Children

Anthropometric data on height and weight collected in the 2006-07 SDHS permit the measurement and evaluation of the nutritional status of young children in Swaziland. This evaluation allows identification of subgroups of the child population that are at increased risk of faltered growth, disease, impaired mental development, and death.

### 11.1.1 Measurement of Nutritional Status among Young Children

In the 2006-07 SDHS, height and weight data were obtained for all children under age six living in the households selected for the SDHS sample, regardless of whether their mother was interviewed in the survey. Weight measurements were obtained using lightweight, bathroom-type scales with a digital screen designed and manufactured under the guidance of UNICEF. Height measurements were carried out using a measuring board produced by Shorr Productions. Children younger than 24 months were measured lying down (recumbent length) on the board, while standing height was measured for older children.

The height and weight data obtained in the SDHS were used to compute the three separate indices of children's nutritional status shown in Table 11.1: height-for-age, weight-for-height, and weight-forage. The indices are calculated using new growth standards generated by WHO from data collected in a Multicentre Growth Reference Study (WHO, 2006). The study, whose sample included 8,440 children in six countries, was designed to provide standards for how children grow under optimal conditions. Children who fall more than two standard deviations below ( -2 SD ) the WHO Child Growth reference population median are considered undernourished, while those who fall more than three standard deviations below (-3 SD) the reference median are considered severely undernourished.

### 11.1.2 Results of Data Collection

Although data were collected for all children under age six, the analysis is limited to children under age five. Height and weight measurements were obtained for 94 percent of the 3,301 children under age five who were present in SDHS households at the time of the survey (see Table C.3). Of these children, 11 percent were considered to have implausibly high or low values for the height or weight measures or lacked data on the child's age in months (not shown in table). The following analysis focuses on the children for whom complete and plausible anthropometric and age data were collected.

| Table 11.1 Nutritional status of children |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Height-for-age |  |  | Weight-for-height |  |  |  | Weight-for-age |  |  |  | Number of children |
| Background characteristic | Percentage below -3 SD | $\begin{gathered} \text { Percentage } \\ \text { below } \\ -2 \mathrm{SD}^{1} \\ \hline \end{gathered}$ | Mean Zscore (SD) | Percentage below -3 SD | Percentage below -2 SD $^{1}$ | Percentage above +2 SD | Mean Zscore (SD) | $\qquad$ | Percentage below -2 SD $^{1}$ | Percentage above +2 SD | Mean Zscore (SD) |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | 5.1 | 19.7 | -0.3 | 1.0 | 2.9 | 22.3 | 0.9 | 0.0 | 5.3 | 5.5 | 0.3 | 222 |
| 6-8 | 4.7 | 12.3 | -0.1 | 1.2 | 4.0 | 11.0 | 0.3 | 1.8 | 5.2 | 4.6 | 0.0 | 172 |
| 9-11 | 5.9 | 17.7 | -0.5 | 2.4 | 7.1 | 12.3 | 0.4 | 1.2 | 8.4 | 3.6 | -0.0 | 145 |
| 12-17 | 10.6 | 28.4 | -1.2 | 1.1 | 3.8 | 12.4 | 0.6 | 0.8 | 6.7 | 5.0 | -0.1 | 305 |
| 18-23 | 19.1 | 42.9 | -1.7 | 1.2 | 3.5 | 11.5 | 0.7 | 1.3 | 7.5 | 2.3 | -0.3 | 272 |
| 24-35 | 12.8 | 37.6 | -1.6 | 0.5 | 0.9 | 11.3 | 0.7 | 0.9 | 4.6 | 1.5 | -0.3 | 583 |
| 36-47 | 10.7 | 29.7 | -1.5 | 0.9 | 2.2 | 8.7 | 0.6 | 0.5 | 4.5 | 1.0 | -0.5 | 587 |
| 48-59 | 8.0 | 24.8 | -1.3 | 0.5 | 1.5 | 7.0 | 0.5 | 0.7 | 5.0 | 1.1 | -0.5 | 655 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 12.0 | 32.2 | -1.3 | 1.1 | 3.1 | 11.0 | 0.6 | 0.8 | 5.7 | 2.2 | -0.3 | 1,453 |
| Female | 8.6 | 25.6 | -1.1 | 0.7 | 1.9 | 10.6 | 0.6 | 0.8 | 5.1 | 2.5 | -0.2 | 1,488 |
| Birth interval in months ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| First birth ${ }^{3}$ | 10.5 | 27.4 | -1.3 | 1.0 | 2.2 | 10.4 | 0.6 | 0.4 | 5.0 | 1.5 | -0.3 | 639 |
| <24 | 12.0 | 34.2 | -1.3 | 0.4 | 1.7 | 9.1 | 0.6 | 1.1 | 7.4 | 1.8 | -0.3 | 235 |
| 24-47 | 7.9 | 29.4 | -1.3 | 0.8 | 2.4 | 10.9 | 0.6 | 0.7 | 5.1 | 2.8 | -0.3 | 762 |
| 48+ | 8.6 | 22.0 | -1.0 | 0.9 | 3.5 | 11.6 | 0.6 | 0.7 | 3.8 | 2.5 | -0.2 | 515 |
| Size at birth ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Very small | (13.8) | (39.8) | (-1.7) | (0.0) | (0.0) | (6.5) | (0.4) | (0.0) | (7.0) | (0.0) | (-0.7) | 38 |
| Small | 18.8 | 42.8 | -1.7 | 1.4 | 2.5 | 8.1 | 0.4 | 1.4 | 10.3 | 1.0 | -0.7 | 258 |
| Average or larger | 7.8 | 24.9 | -1.1 | 0.7 | 2.6 | 11.4 | 0.6 | 0.5 | 4.2 | 2.6 | -0.2 | 1,786 |
| Missing | 10.1 | 33.0 | -1.3 | 2.8 | 2.8 | 6.7 | 0.3 | 2.8 | 4.7 | 0.0 | -0.5 | 64 |
| Mother's interview status |  |  |  |  |  |  |  |  |  |  |  |  |
| Interviewed | 9.3 | 27.6 | -1.2 | 0.8 | 2.5 | 10.7 | 0.6 | 0.7 | 5.0 | 2.2 | -0.3 | 2,152 |
| Not interviewed but in household | 5.6 | 25.9 | -0.9 | 3.7 | 6.8 | 12.1 | 0.6 | 0.0 | 3.9 | 7.9 | -0.1 | 78 |
| Not interviewed, and not in the household ${ }^{4}$ | 13.8 | 33.3 | -1.4 | 0.8 | 1.9 | 10.9 | 0.6 | 1.3 | 6.8 | 2.0 | 0.4 | 711 |
| Mother's nutritional status ${ }^{5}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Thin (BMI<18.5) | (22.5) | (44.0) | (-1.6) | (5.1) | (9.7) | (5.5) | (0.0) | (5.1) | (19.8) | (0.0) | (-0.9) | 34 |
| Normal (BMI 18.5-24.9) | 10.1 | 28.5 | -1.2 | 1.2 | 3.3 | 7.7 | 0.4 | 0.7 | 5.2 | 1.5 | -0.4 | 949 |
| Overwieght/obese $(\mathrm{BMI} \geq 25)$ | 8.1 | 26.2 | -1.2 | 0.5 | 1.8 | 13.4 | 0.7 | 0.5 | 4.4 | 2.8 | -0.2 | 1,185 |
| Missing | 6.3 | 29.2 | -0.8 | 0.0 | 3.5 | 12.3 | 0.7 | 0.0 | 4.5 | 11.6 | 0.1 | 53 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 6.7 | 23.1 | -0.8 | 0.8 | 3.2 | 14.9 | 0.7 | 0.0 | 4.5 | 5.1 | -0.0 | 483 |
| Rural | 11.0 | 30.0 | -1.3 | 0.9 | 2.3 | 10.0 | 0.6 | 1.0 | 5.6 | 1.8 | -0.3 | 2,457 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 11.2 | 31.6 | -1.3 | 1.3 | 3.1 | 14.1 | 0.7 | 0.8 | 6.7 | 2.8 | -0.3 | 755 |
| Manzini | 10.0 | 29.5 | -1.2 | 1.1 | 2.3 | 9.4 | 0.6 | 1.0 | 5.7 | 2.0 | -0.3 | 869 |
| Shiselweni | 11.1 | 28.9 | -1.3 | 0.8 | 2.1 | 8.5 | 0.5 | 0.6 | 5.2 | 2.5 | -0.4 | 745 |
| Lubombo | 8.4 | 24.4 | -1.2 | 0.2 | 2.5 | 11.6 | 0.6 | 0.7 | 3.7 | 1.9 | -0.2 | 571 |
| Mother's education ${ }^{6}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 10.3 | 37.5 | -1.5 | 1.1 | 2.0 | 8.1 | 0.5 | 0.7 | 6.7 | 0.0 | -0.6 | 211 |
| Lower primary | 11.4 | 32.1 | -1.5 | 1.8 | 5.8 | 6.3 | 0.4 | 2.3 | 4.6 | 0.6 | -0.5 | 210 |
| Higher primary | 12.8 | 33.3 | -1.3 | 1.0 | 2.8 | 9.1 | 0.5 | 0.6 | 6.1 | 1.9 | -0.4 | 593 |
| Secondary | 6.8 | 25.8 | -1.2 | 1.0 | 2.8 | 10.4 | 0.5 | 0.4 | 4.7 | 1.7 | -0.3 | 732 |
| High school | 8.1 | 19.0 | -0.8 | 0.0 | 1.1 | 15.4 | 0.8 | 0.4 | 4.4 | 5.0 | 0.1 | 352 |
| Tertiary | 3.2 | 10.5 | -0.6 | 0.8 | 1.8 | 19.6 | 1.0 | 0.0 | 0.9 | 9.4 | 0.3 | 130 |
|  |  |  |  |  |  |  |  |  |  |  | Continued... |  |



### 11.1.3 Nutritional Status Indices

## Height-for-age

A child who is below -2 SD from the median of the WHO reference population in terms of height-for-age is considered stunted or short for his/her age. Stunting is an indicator of linear growth retardation. It reflects failure to receive adequate nutrition over a long period of time and is also affected by recurrent and chronic illness. The height-for-age index, therefore, provides a measure of the long-term effects of malnutrition in a population and is not sensitive to recent, short-term changes in dietary intake.

At the national level, 29 percent of children under five are stunted, while the proportion severely stunted is 10 percent. Stunting is highest ( 43 percent) among children age $18-23$ months and lowest ( 12 percent) among children age 6-8 months (Table 11.1). The proportion stunted among male children (32 percent) is higher than that among female children (26 percent).

The stunting level varies markedly with both the birth interval and the size of the child at birth. Around one-third of children born less than 24 months after an older sibling are stunted compared with just over one-fifth of children born 48 months or more after their older brother or sister. Forty-three percent of children reported by their mothers as small at birth are stunted compared with 25 percent of children reported as being average or large at birth.

Urban children (23 percent) are less likely to be stunted than rural children (30 percent). Looking at regional patterns, Hhohho region ( 32 percent) has the highest proportion of stunted children, while Lubombo region has the lowest ( 24 percent). Education and wealth are both inversely related to stunting levels. For example, children of mothers with tertiary education have the lowest level of stunting (11 percent), while children whose mothers have no education have the highest level of stunting (38 percent).

## Weight-for-height

The weight-for-height index measures body mass in relation to body height or length and describes current nutritional status. Children whose weight-for-height is below minus two standard deviations (-2 SD) from the WHO Child Growth Standards reference population median are considered to be wasted, i.e., too thin for their height. Wasting represents the failure to receive adequate nutrition in the period immediately preceding the survey and may be the result of inadequate food intake or a recent episode of illness causing loss of weight and the onset of malnutrition.

Nationally, as Table 11.1 shows, 3 percent of children are wasted, and the proportion of severely wasted children is 1 percent. The wasting level peaks at 7 percent among children age 9-11 months. Other differences in the wasting level are generally minor. For example, 3 percent of urban children are wasted compared with 2 percent of rural children.

The weight-for-height index can also be used to assess the extent to which children's weight-forheight exceeds that considered normal. Children whose weight-for-height falls above plus two standard deviations (+2 SD) from the WHO reference population median are considered too heavy for their height.

Nationally, 11 percent of children are too heavy for their height. The proportion of children considered too heavy decreases with age. It is somewhat higher among urban than rural children. Children whose mothers have a tertiary education are more than twice as likely as children whose mothers never attended school to be too heavy ( 20 percent and 8 percent, respectively).

## Weight-for-age

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic malnutrition. Children whose weight-for-age is below minus two standard deviations ( -2 SD ) from the WHO reference population median are classified as underweight. Children whose weight-for-age is below minus three standard deviations ( -3 SD ) are considered severely underweight.

The prevalence of underweight children nationally is 5 percent, and the prevalence of severely underweight children is 1 percent (Table 11.1). The proportion underweight increases with age, peaking at 8 percent among children age 9-11 months.

Table 11.1 also shows the proportion of children whose weight-for-age falls above plus two standard deviations (+2 SD) from the WHO reference population median; these children are considered to be overweight. Nationally, only 2 percent of children are overweight for their age.

### 11.2 Initiation of Breastreeding

Early initiation of breastfeeding is encouraged for a number of reasons. Mothers benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps the contraction of the uterus and reduces postpartum blood loss. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also fosters bonding between mother and child.

Table 11.2 shows the percentage of all children born in the five years before the survey by breastfeeding status and background characteristics. For last-born children in this period who were ever breastfed, the table also considers the proportions breastfed in the first hour and the first day after birth and the proportion given a prelacteal feed, i.e., the proportion receiving something other than breast milk
during the first three days after birth. The practice of giving prelacteal feeds is discouraged because it limits the frequency of suckling by the infant and exposes the baby to the risk of infection.

Overall, 87 percent of children were breastfed at some point (i.e., ever breastfed). Although most children were breastfed, children whose delivery was assisted by a health professional or who were born in a health facility are more likely to have been breastfed than children whose delivery was assisted by a traditional birth attendant or other person, or children born at home.

Looking at the timing of the first feeding, 67 percent of last-born children were breastfed within one hour of birth, and 85 percent were breastfed within one day after delivery. Differentials in the timing of the initiation of breastfeeding by sex and urban-rural residence are small. However, breastfeeding was initiated somewhat earlier for infants in Hhohho and Manzini than for infants in Shiselweni and Lubombo. The likelihood that breastfeeding was initiated shortly after birth tends to increase with the mother's education and wealth quintile. Breastfeeding was more likely to be initiated early among children delivered with the assistance of a health professional or born in a health facility than among children whose delivery was assisted by a traditional birth attendant or other person, or children born at home.

The proportion of infants who received a prelacteal feed during the first three days of life was 19 percent. Mothers in Lubombo region (27 percent) were more likely to practice prelacteal feeding than mothers in the other regions. Children delivered at home were more than twice as likely as those born in a health facility to receive a prelacteal feed ( 29 percent and 14 percent, respectively).

## Table 11.2 Initial breastfeeding

Percentage of children born in the five years preceding the survey who were ever breastfed, and for last-born children in the five years preceding the survey ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth and the percentage who received a prelacteal feed, by background characteristics, Swaziland 2006-07

| Background characteristic | Breastfeeding among children born in past five years |  | Among last-born children ever breastfed |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Percentage | Percentage | Percentage | Number of |
|  | Percentage ever breastfed | Number of children born in past five years | who started breastfeeding within 1 hour of birth | who started breastfeeding within 1 day of birth ${ }^{1}$ | who received a prelacteal feed ${ }^{2}$ | last-born children ever breastfed |
| Sex |  |  |  |  |  |  |
| Male | 86.7 | 1,428 | 64.9 | 83.7 | 20.6 | 1,026 |
| Female | 87.1 | 1,401 | 68.7 | 87.3 | 17.4 | 958 |
| Residence |  |  |  |  |  |  |
| Urban | 85.7 | 630 | 67.9 | 88.7 | 16.5 | 439 |
| Rural | 87.2 | 2,199 | 66.4 | 84.5 | 19.8 | 1,545 |
| Region |  |  |  |  |  |  |
| Hhohho | 88.0 | 766 | 70.9 | 90.7 | 13.5 | 534 |
| Manzini | 85.2 | 870 | 73.5 | 88.7 | 16.4 | 601 |
| Shiselweni | 86.7 | 615 | 60.9 | 78.8 | 21.8 | 431 |
| Lubombo | 88.2 | 577 | 57.5 | 80.8 | 27.2 | 418 |
| Mother's education |  |  |  |  |  |  |
| No education | 85.9 | 263 | 65.5 | 84.4 | 20.5 | 172 |
| Lower primary | 86.2 | 245 | 65.8 | 82.0 | 22.2 | 173 |
| Higher primary | 87.5 | 748 | 67.3 | 84.0 | 19.6 | 525 |
| Secondary | 87.2 | 951 | 67.2 | 86.5 | 18.9 | 659 |
| High school | 86.7 | 457 | 64.1 | 85.8 | 16.6 | 335 |
| Tertiary | 85.5 | 166 | 71.1 | 90.9 | 17.6 | 121 |
| Assistance at delivery |  |  |  |  |  |  |
| Health professional ${ }^{3}$ | 91.0 | 2,102 | 68.7 | 87.3 | 15.6 | 1,488 |
| Traditional birth attendant | 74.1 | 149 | 56.0 | 78.3 | 22.0 | 106 |
| Other | 74.3 | 448 | 60.8 | 78.7 | 32.4 | 295 |
| No one | 80.2 | 125 | 66.1 | 84.1 | 29.0 | 95 |
| Place of delivery |  |  |  |  |  |  |
| Health facility | 90.7 | 1,332 | 70.0 | 89.0 | 14.3 | 929 |
| At home | 75.5 | 715 | 61.1 | 79.4 | 29.4 | 489 |
| Other | 91.3 | 778 | 66.1 | 84.7 | 18.0 | 566 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 82.4 | 572 | 60.2 | 79.6 | 25.6 | 385 |
| Second | 86.5 | 603 | 68.7 | 87.2 | 18.3 | 406 |
| Middle | 88.1 | 554 | 65.4 | 83.6 | 16.7 | 393 |
| Fourth | 90.0 | 554 | 69.2 | 85.1 | 17.0 | 400 |
| Highest | 87.6 | 546 | 69.7 | 91.3 | 18.0 | 401 |
| Total | 86.9 | 2,829 | 66.7 | 85.4 | 19.1 | 1,984 |

Note: Table is based on births in the past five years whether the children were living or dead at the time of interview. Total includes seven unweighted children with information missing on assistance at delivery and six unweighted children with information missing on place of delivery
${ }^{1}$ Includes children who started breastfeeding within one hour of birth
${ }^{2}$ Children given something other than breast milk during the first three days of life
${ }^{3}$ Doctor, nurse/midwife, or nursing assistant

### 11.3 Breastfeeding Status by Age

UNICEF and WHO recommend that children be exclusively breastfed during the first 6 months of life and that children be given solid or semi-solid complementary foods in addition to continued breastfeeding from age 6 to 24 months (or more), when the child is fully weaned. Information on complementary feeding was obtained for the youngest child born in the three-year period before the

SDHS by asking mothers about the foods and liquids given to the child the day and night before the survey.

Exclusive breastfeeding is recommended because breast milk is uncontaminated and contains all the nutrients necessary for children in the first few months of life. In addition, the mother's antibodies in breast milk provide immunity to disease. Early supplementation is discouraged for several reasons. First, it exposes infants to pathogens and increases the risk of infection. Second, it decreases infants' intake of breast milk and therefore suckling, which reduces breast milk production. Third, in low-resource settings, supplementary food is often nutritionally inferior.

Table 11.3 presents the percent distribution of youngest children under three years living with the mother by breastfeeding status and the percentage of children under three years using a bottle with a nipple, according to age in months. Overall, the prevalence of exclusive breastfeeding during the first six months is 32 percent. While slightly more than half ( 53 percent) of infants less than one month are receiving only breast milk, only 17 percent of children age 4-5 months are exclusively breastfed.

Table 11.3 Breastfeeding status by age
Percent distribution of youngest children under three years who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under three years using a bottle with a nipple, according to age in months, Swaziland 2006-07

| Age in months | Not breastfeeding | Exclusively breastfed | Breastfeeding and consuming: |  |  |  | Total | Percentage currently breastfeeding | Number of youngest children under three years | Percentage using a bottle with a nipple ${ }^{1}$ | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Plain water only | Non-milk liquids/ juice | Other milk | Complementary foods |  |  |  |  |  |
| 0-1 | 10.8 | 53.1 | 8.9 | 4.2 | 4.3 | 18.8 | 100.0 | 89.2 | 64 | 26.9 | 65 |
| 2-3 | 9.4 | 36.1 | 4.4 | 1.7 | 12.4 | 36.0 | 100.0 | 90.6 | 90 | 31.5 | 93 |
| 4-5 | 10.3 | 16.7 | 4.4 | 0.0 | 3.6 | 64.9 | 100.0 | 89.7 | 107 | 29.1 | 108 |
| 6-8 | 18.4 | 3.8 | 0.9 | 1.4 | 0.0 | 75.5 | 100.0 | 81.6 | 157 | 34.4 | 160 |
| 9-11 | 15.4 | 0.0 | 0.0 | 1.0 | 0.0 | 83.6 | 100.0 | 84.6 | 135 | 17.7 | 141 |
| 12-17 | 27.8 | 0.6 | 0.9 | 0.0 | 0.0 | 70.7 | 100.0 | 72.2 | 260 | 20.7 | 283 |
| 18-23 | 61.9 | 0.0 | 0.0 | 0.0 | 0.0 | 38.1 | 100.0 | 38.1 | 216 | 10.3 | 248 |
| 24-35 | 96.2 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 | 100.0 | 3.8 | 324 | 4.3 | 483 |
| 0-3 | 9.9 | 43.2 | 6.3 | 2.7 | 9.0 | 28.9 | 100.0 | 90.1 | 153 | 29.6 | 158 |
| 0-5 | 10.1 | 32.3 | 5.5 | 1.6 | 6.8 | 43.7 | 100.0 | 89.9 | 260 | 29.4 | 265 |
| 6-9 | 18.5 | 3.1 | 0.8 | 1.1 | 0.0 | 76.5 | 100.0 | 81.5 | 192 | 31.4 | 199 |
| 12-15 | 21.6 | 0.8 | 1.2 | 0.0 | 0.0 | 76.4 | 100.0 | 78.4 | 194 | 21.3 | 206 |
| 12-23 | 43.2 | 0.3 | 0.5 | 0.0 | 0.0 | 56.0 | 100.0 | 56.8 | 476 | 15.8 | 531 |
| 20-23 | 69.3 | 0.0 | 0.0 | 0.0 | 0.0 | 30.7 | 100.0 | 30.7 | 144 | 8.3 | 167 |

Note: Breastfeeding status refers to a 24 -hour period (yesterday and the past night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and non-milk liquids and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary foods are classified in that category as long as they are breastfeeding as well.
${ }^{1}$ Based on all children under three years

Figure 11.1 shows that complementary feeding starts early. Nineteen percent of infants less than one month, 36 percent of infants 2-3 months, and 65 percent of infants $4-5$ months are given complementary foods (semi-solids and solids) in addition to breast milk. Although many children receive complementary foods too early, complementary feeding is started for some children too late. All children age 6-9 months should receive complementary foods, but Table 11.3 shows that only 77 percent of children in this age group are actually consuming complementary foods.

Figure 11.1 Infant Feeding Practices by Age


Bottle-feeding is still common in Swaziland; 29 percent of infants less than six months are fed with a bottle with a nipple. The use of a bottle with a nipple, regardless of the contents (breast milk, formula, or any other liquid), requires hygienic handling to avoid contamination that may cause infection in the infant.

### 11.4 Duration and Frequency of Breastfeeding

Table 11.4 presents information on the duration of breastfeeding among children born in the last three years, and on the frequency of breastfeeding among children under six months of age. The estimates of the median and mean durations of breastfeeding are based on current status data, that is, the proportion of children born in the three years preceding the survey who were being breastfed at the time of the survey.

The median duration of any breastfeeding in Swaziland is almost 17 months (Table 11.4). Reflecting the tendency to initiate complementary feeds early, the median duration of exclusive breastfeeding is much shorter ( 0.7 months). The median duration of predominant breastfeeding (exclusive breastfeeding or breastfeeding in combination with plain water, water-based liquids, or juices) is 1.6 months. These durations do not vary much by sex of the child, educational attainment of the mother, household wealth, or urban-rural residence.

It is important for an infant to breastfeed frequently as this improves milk production. Almost all breastfeeding children less than six months of age (97 percent) were breastfed at least six times during the 24 hours preceding the survey, which meets the WHO/UNICEF recommendations for optimal breastfeeding. The mean number of daytime feeds is 8.3 , while the mean number of nighttime feeds is 6.9 .

Table 11.4 Median duration and frequency of breastfeeding
Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, percentage of breastfeeding children under six months living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by background characteristics, Swaziland 2006-07

| Background characteristic | Median duration (months) of breastfeeding among children born in the past three years ${ }^{1}$ |  |  | Frequency of breastfeeding among children under six months ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Percentage breastfed 6+ times in past 24 hours | Mean number of day feeds | Mean number of night feeds | Number of children |
|  | Any breastfeeding | Exclusive breastfeeding | Predominant breastfeeding ${ }^{3}$ |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| Male | 16.9 | 0.9 | 1.6 | 96.1 | 7.7 | 6.7 | 122 |
| Female | 16.5 | 0.7 | 1.4 | 97.0 | 8.9 | 7.1 | 107 |
| Residence |  |  |  |  |  |  |  |
| Urban | 17.0 | 0.6 | 0.7 | 91.6 | 7.3 | 6.7 | 49 |
| Rural | 16.7 | 1.0 | 1.8 | 97.8 | 8.5 | 7.0 | 181 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 17.8 | 1.5 | 2.1 | 97.1 | 8.0 | 8.0 | 61 |
| Manzini | 16.1 | 0.5 | 0.6 | 93.4 | 7.9 | 6.5 | 63 |
| Shiselweni | 15.7 | 1.5 | 1.8 | 98.4 | 8.0 | 5.6 | 54 |
| Lubombo | 16.6 | 1.5 | 1.8 | 97.6 | 9.4 | 7.6 | 51 |
| Mother's education |  |  |  |  |  |  |  |
| No education | (18.0) | (2.0) | (2.3) | (100.0) | (9.4) | (7.6) | 30 |
| Lower primary | * | * | * | * | * | * | 15 |
| Higher primary | 16.7 | 0.9 | 2.0 | 97.3 | 8.4 | 5.9 | 57 |
| Secondary | 16.6 | 0.7 | 1.0 | 96.4 | 7.9 | 7.2 | 76 |
| High school | (16.0) | (1.3) | (1.9) | (98.1) | (8.2) | (7.1) | 44 |
| Tertiary | * | * | * | * | * | * | 7 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 17.2 | 1.9 | 2.3 | 98.4 | 8.3 | 6.3 | 54 |
| Second | (17.6) | (1.1) | (2.1) | (100.0) | (9.5) | (7.9) | 47 |
| Middle | (16.9) | (0.7) | (0.9) | (100.0) | (8.6) | (7.1) | 43 |
| Fourth | (16.3) | (0.6) | (1.1) | (91.7) | (7.5) | (6.9) | 52 |
| Highest | (13.9) | (0.6) | (0.6) | (91.3) | (7.3) | (6.2) | 33 |
| Total | 16.7 | 0.7 | 1.6 | 96.5 | 8.3 | 6.9 | 229 |
| Mean for all children | 15.7 | 2.6 | 3.1 | na | na | na | na |

Note: Median and mean durations are based on current status. Includes children living and deceased at the time of the survey. Figures in parentheses are based on 25-49 unweighted children. An asterisk indicates that an estimate is based on fewer than 25 unweighted children and has been suppressed. na $=$ Not applicable
${ }^{1}$ It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding.
${ }^{2}$ Excludes children without a valid answer on the number of times breastfed
${ }^{3}$ Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

### 11.5 Dietary Diversity among Young Children

In the 2006-07 SDHS, women who had at least one child under the age of three living with them were asked questions about the types of foods and liquids their youngest child had consumed during a 24 hour period prior to the survey. Mothers were also asked about the number of times the child had eaten solid or semi-solid foods during the period.

The results of these questions are subject to a number of limitations. First, the results do not apply to the full universe of young children. Some children under age three were excluded from consideration because they were not the youngest child under age three or because they were not living with the mother. The dietary data also are subject to recall errors on the mother's part. In addition, the mother may not be able to report fully on the child's intake of food and liquids if the child was fed by other individuals during the period. Despite these problems, the SDHS data on the types of foods and liquids young children are consuming are useful in assessing the diversity of children's diets.

### 11.5.1 Foods and Liquids Consumed by Infants and Young Children

Appropriate nutrition includes feeding children a variety of foods to ensure that nutrient requirements are met. Vitamin A-rich fruits and vegetables should be consumed daily. Although eating a range of fruits and vegetables, especially those rich in vitamin $A$, is important, studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients (WHO/UNICEF, 1998). Therefore, it has been advised that meat, poultry, fish, or eggs should be eaten daily, or as often as possible. Fat is also important in the diets of infants and young children because it provides essential fatty acids, facilitates absorption of fat-soluble vitamins (such as vitamin A), and enhances dietary energy density and palatability. Tea and coffee contain compounds that inhibit iron absorption and are not recommended for children. Sugary drinks and excessive juice consumption should be avoided because, other than energy, they contribute little to the diet and as a result decrease the child's appetite for more nutritious foods (PAHO/WHO, 2003).

Table 11.5 is based on information reported by mothers on the foods and liquids consumed by their youngest child during the 24 -hour period prior to the survey. As expected, the proportion of children who consumed foods or liquids included in the various food groups generally increased with the age of the child. Children still being breastfed are less likely to consume the various types of foods than children who are not being breastfed.

Table 11.5 Foods and liquids consumed by children in the day and night preceding the interview
Percentage of youngest children under three years living with the mother who consumed specific foods in the day and night preceding the interview, by breastfeeding status and age, Swaziland 2006-07


[^11]The results in Table 11.5 document the early introduction of solid and semi-solid foods into the diets of infants in Swaziland. For example, 40 percent of breastfeeding infants age 2-3 months are receiving solid and semi-solid foods, with 37 percent given food made from grain, 22 percent given infant formula, and 13 percent given fortified baby foods. The table also highlights other issues relating to young children's diets. Of particular concern is the fact that around one-third of children age 6-23 months, whether breastfeeding or not, did not consume any vitamin A-rich food during the 24 -hour period before the survey. Consumption of meat, fish, poultry and eggs and cheese, yogurt and other milk products also is important for balanced physical and mental development. However, many children in Swaziland are not consuming these foods on a daily basis. For example, among non-breastfeeding children age 6-23 months, only half ate meat, fish, poultry, or eggs at least once in the 24 hours prior to the survey and only 42 percent consumed cheese, yogurt, or other milk products.

### 11.5.2 Infant and Young Child Feeding (IYCF) Practices

Appropriate infant and young child feeding (IYCF) practices include introduction of solid/semisolid foods at age 6 months and increasing the amount and variety of foods as the child gets older, while maintaining frequent breastfeeding. Guidelines have been established with respect to these practices for children age 6-23 months (PAHO/WHO, 2003; WHO, 2005).

Table 11.6 presents several summary IYCF indicators. The indicators take into account the percentage of children for whom feeding practices met minimum standards with respect to food diversity (i.e., the number of food groups consumed) and the consumption of breast milk or other milk or milk products. Breastfed children are considered fed according to the minimum standards if they consume foods from at least three food groups. ${ }^{1}$ Non-breastfed children are considered fed in accordance with the minimum standards if they consume milk or milk products and four food groups (including milk products).

According to the results presented in Figure 11.2, 70 percent of children age 6-23 months were fed according to minimum standards with respect to food diversity. Among breastfed children age 6-23 months, about three-quarters are fed according to minimum standards (at least three food groups), while among non-breastfed children age 6-23 months, 60 percent are fed according to the minimum standards (at least four food groups).

Table 11.6 shows the variation in the proportion of children fed according to the IYCF diversity standards by background characteristics. The results indicate that boys and girls are equally likely to be fed according to the minimum food diversity standards. Looking at age, the main difference in the proportion fed according to the minimum standards is between children age 6-8 months ( 50 percent) and children 9 months and older ( $72-78$ percent). Urban children ( 76 percent) are somewhat more likely than rural children ( 68 percent) to be fed according minimum diversity standards. The proportion fed according to the minimum standards is lowest in Shiselweni ( 62 percent) and highest in Manzini (76 percent). Although not uniform, the proportion fed according the minimum standards tends to rise with mother's level of education and wealth quintile.

[^12]| Table 11.6 Infant and young child feeding (IYCF) practices |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on number of food groups consumed and number of times fed during the day and night preceding the survey, by breastfeeding status and background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  | Among breastfed <br> children 6-23 months, <br> percentage fed:Among non-breastfed children <br> $6-23$ months, percentage fed:$\quad$Among all children 6-23 <br> months, percentage fed: |  |  |  |  |  |  |  |
| Background characteristic | $\begin{gathered} 3+\text { food } \\ \text { groups } \end{gathered}$ | Number of breastfed children 5-23 month | Milk or milk products ${ }^{2}$ | $4+\text { food }$ groups | Number of non-breastfed children 6-23 months | Breast milk or milk products | $\begin{gathered} 3+\text { or } \\ 4+\text { food }^{3} \\ \text { groups }^{3} \\ \hline \end{gathered}$ | Number of all children 6-23 months |
| Age |  |  |  |  |  |  |  |  |
| 6-8 | 52.6 | 128 | 92.9 | (40.3) | 29 | 98.7 | 50.4 | 157 |
| 9-11 | 77.2 | 114 | 80.9 | * | 21 | 97.1 | 72.8 | 135 |
| 12-17 | 81.7 | 188 | 74.8 | 66.6 | 72 | 93.0 | 77.5 | 260 |
| 18-23 | 87.2 | 82 | 53.8 | 62.3 | 133 | 71.4 | 71.8 | 216 |
| Sex |  |  |  |  |  |  |  |  |
| Male | 74.3 | 267 | 71.5 | 60.8 | 131 | 90.7 | 69.9 | 398 |
| Female | 74.4 | 245 | 60.9 | 59.0 | 125 | 86.8 | 69.2 | 369 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 81.7 | 107 | 79.7 | 61.8 | 46 | 93.9 | 75.7 | 153 |
| Rural | 72.4 | 405 | 63.4 | 59.5 | 209 | 87.5 | 68.0 | 615 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 72.4 | 140 | 55.7 | 53.5 | 61 | 86.6 | 66.7 | 201 |
| Manzini | 78.3 | 160 | 79.7 | 70.2 | 83 | 93.0 | 75.5 | 243 |
| Shiselweni | 66.1 | 102 | 74.0 | 55.9 | 60 | 90.4 | 62.3 | 163 |
| Lubombo | 78.8 | 110 | 47.9 | 55.3 | 51 | 83.6 | 71.4 | 160 |
| Mother's education |  |  |  |  |  |  |  |  |
| No education | (62.3) | 46 | 20.7 | * | 11 | 84.5 | 56.2 | 57 |
| Lower primary | (70.7) | 48 | 44.2 | * | 21 | 83.0 | 67.3 | 69 |
| Higher primary | 73.0 | 153 | 58.5 | 44.1 | 63 | 87.9 | 64.6 | 215 |
| Secondary | 75.3 | 173 | 66.7 | 61.4 | 94 | 88.2 | 70.4 | 267 |
| High school | 82.9 | 77 | 84.4 | (73.5) | 49 | 94.0 | 79.3 | 125 |
| Tertiary | * | 16 | 97.8 | * | 17 | (98.9) | (84.8) | 34 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 67.3 | 119 | 62.7 | 53.9 | 53 | 88.5 | 63.2 | 171 |
| Second | 76.5 | 121 | 48.0 | (56.3) | 48 | 85.3 | 70.8 | 169 |
| Middle | 70.9 | 108 | 62.4 | 59.7 | 61 | 86.4 | 66.9 | 170 |
| Fourth | 78.9 | 90 | 72.0 | (58.6) | 45 | 90.7 | 72.2 | 135 |
| Highest | 81.5 | 73 | 88.2 | 71.4 | 49 | 95.3 | 77.5 | 122 |
| Total | 74.3 | 512 | 66.3 | 59.9 | 255 | 88.8 | 69.5 | 767 |
| Note: Figures in parentheses are based on 25-49 unweighted children. An asterisk indicates that an estimate is based on fewer than 25 unweighted children and has been suppressed. <br> ${ }^{1}$ Food groups: a) infant formula, milk other than breast milk, cheese or yogurt or other milk products; b) foods made from grains, roots, and tubers, including porridge, fortified baby food from grains; c) vitamin A-rich fruits and vegetables; d) other fruits and vegetables; e) eggs; f) meat, poultry, fish, and shellfish (and organ meats); g) legumes and nuts; <br> h) foods made with oil, fat, butter <br> ${ }^{2}$ Includes commercial infant formula, fresh, tinned and powdered animal milk, and cheese, yogurt, and other milk products <br> ${ }^{3} 3+$ food groups for breastfed children and 4+ food groups for non-breastfed children |  |  |  |  |  |  |  |  |

Figure 11.2 Percentage of Children Age 6-23 Months Who Received Food From the Recommended Minimum Number of Food Groups (Daily)


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### 11.6 USE OF IODIZED SALT

Iodine is an important micronutrient. Dietary deficiency of iodine constitutes a major, global public health concern. A lack of sufficient iodine is known to cause goitre, cretinism (a severe form of neurological defect), spontaneous abortion, premature birth, infertility, stillbirth, and increased child mortality. Iodine deficiency disorder (IDD) is the single most common cause of preventable mental retardation and brain damage in the world.

In the 2006-07 SDHS, a rapid test was used to determine the presence or absence of iodine in the salt used for cooking in the household. The test kit consisted of ampoules of a stabilized starch solution and a weak acid-based solution. A drop of the starch solution was squeezed onto a salt sample from the household. A change in colour indicated the presence of iodine.

Table 11.7 shows that salt was tested in 93 percent of the households sampled in the 2006-07 SDHS. The overall percentage of households using iodized salt is 80 percent. The largest differential in household use of iodized salt is between households in the lowest wealth quintiles and those in the highest wealth quintile ( 76 percent and 83 percent, respectively).

| Table 11.7 Presence of iodized salt in household |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among all households, percentage tested for iodine content and percentage with no salt; and among households with salt tested, percent distribution by level of iodine in salt (parts per million or ppm), according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  | Amo househ perce | g all ds, the ntage |  | Among dis | households w ribution by io | ith salt tested odine level in | percent <br> salt |  |
| Background characteristic | With salt tested | With no salt | Number of households | None (0 ppm) | Inadequate (<15 ppm) | Adequate (15+ ppm) | Total | Number of households |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 93.1 | 6.9 | 1,565 | 3.0 | 15.3 | 81.7 | 100.0 | 1,457 |
| Rural | 93.1 | 6.9 | 3,278 | 2.4 | 18.5 | 79.1 | 100.0 | 3,052 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 95.1 | 4.9 | 1,370 | 1.8 | 14.8 | 83.4 | 100.0 | 1,303 |
| Manzini | 94.4 | 5.6 | 1,537 | 3.1 | 19.0 | 77.9 | 100.0 | 1,451 |
| Shiselweni | 90.1 | 9.9 | 931 | 3.3 | 16.8 | 79.9 | 100.0 | 839 |
| Lubombo | 91.2 | 8.8 | 1,005 | 2.3 | 19.5 | 78.2 | 100.0 | 916 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 89.6 | 10.4 | 824 | 2.9 | 20.8 | 76.3 | 100.0 | 738 |
| Second | 93.1 | 6.9 | 805 | 2.8 | 20.2 | 77.0 | 100.0 | 749 |
| Middle | 93.3 | 6.7 | 866 | 2.5 | 19.8 | 77.7 | 100.0 | 808 |
| Fourth | 93.3 | 6.7 | 1,064 | 2.5 | 15.0 | 82.5 | 100.0 | 993 |
| Highest | 95.1 | 4.9 | 1,284 | 2.5 | 14.2 | 83.3 | 100.0 | 1,221 |
| Total | 93.1 | 6.9 | 4,843 | 2.6 | 17.5 | 79.9 | 100.0 | 4,509 |

### 11.7 Prevalence of Anaemia in Children

Anaemia, a low level of haemoglobin in the blood, decreases the amount of oxygen reaching the tissues and organs of the body and reduces their capacity to function. It is associated with impaired cognitive and motor development in children. Although there are many causes of anaemia, inadequate intake of iron, folate, vitamin $\mathrm{B}_{12}$, or other nutrients usually accounts for the majority of cases in most populations. However, malaria accounts for a significant proportion of anaemia in children under five in malaria-endemic areas. Other causes of anaemia include thalassemia, sickle cell disease, and intestinal worm infestation. Promotion of the use of insecticide-treated bednets and deworming medication every six months for children under age five are some of the important measures to reduce anaemia prevalence among children.

The procedures used in collecting information on anaemia levels among children, women, and men are described in Chapter 1. This section focuses on presenting the results for children from whom samples were obtained for haemoglobin measurement. Given that haemoglobin requirements differ substantially depending on altitude, the anaemia data have been adjusted for altitude using the formulas recommended by the U.S. Centres for Disease Control and Prevention (CDC, 1998).

### 11.7.1 Children Age 6-59 Months

Table 11.8.1 shows the percentage of children age 6-59 months classified as having anaemia, by background characteristics. Overall, 42 percent of children 6-59 months have some degree of anaemia. About one in five of these children are mildly anaemic, 19 percent have moderate anaemia, and less than 1 percent have severe anaemia. There is an association between the age of a child and the prevalence of anaemia. Children less than two years of age are affected more by anaemia, compared with children two
years and above. Severe anaemia, which has a serious effect on the health of an individual, is highest among children age 12-17 months (3 percent).

Boys were found to be anaemic slightly more often than girls ( 44 percent and 40 percent, respectively). The anaemia rate is higher among children living in urban areas ( 50 percent) than in rural areas (40 percent). Anaemia prevalence among children varies across regions, ranging from 38 percent in Lubombo to 45 percent in Manzini region. The variation in anaemia rates by mother's education and wealth quintile is not uniform; however, children whose mothers have tertiary education are markedly less likely to be anaemic than other children.

| Table 11.8.1 Prevalence of anaemia in children 6-59 months |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 6-59 months classified as having anaemia, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |
|  | Anaemia status by haemoglobin level |  |  | Any anaemia | Number of children |
| Background characteristic | $\begin{gathered} \text { Mild } \\ (10.0-10.9 \mathrm{~g} / \mathrm{dl}) \\ \hline \end{gathered}$ | $\begin{gathered} \text { Moderate } \\ (7.0-9.9 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | Severe (below $7.0 \mathrm{~g} / \mathrm{dl})$ |  |  |
| Age in months |  |  |  |  |  |
| 6-8 | 31.6 | 32.1 | 1.4 | 65.2 | 148 |
| 9-11 | 33.2 | 35.2 | 0.9 | 69.3 | 145 |
| 12-17 | 24.0 | 36.4 | 3.1 | 63.6 | 318 |
| 18-23 | 24.9 | 38.7 | 1.3 | 64.9 | 266 |
| 24-35 | 23.9 | 18.1 | 0.6 | 42.6 | 564 |
| 36-47 | 17.6 | 7.4 | 0.2 | 25.2 | 590 |
| 48-59 | 16.7 | 7.9 | 0.0 | 24.6 | 650 |
| Sex |  |  |  |  |  |
| Male | 22.3 | 20.4 | 0.7 | 43.5 | 1,325 |
| Female | 21.3 | 18.0 | 0.9 | 40.1 | 1,356 |
| Mother's interview status |  |  |  |  |  |
| Interviewed | 22.6 | 20.8 | 0.9 | 44.3 | 1,883 |
| Not interviewed but in household | 27.8 | 24.4 | 0.0 | 52.2 | 68 |
| Not interviewed, and not in the household ${ }^{1}$ | 19.2 | 14.7 | 0.6 | 34.5 | 730 |
| Residence |  |  |  |  |  |
| Urban | 27.1 | 22.1 | 0.8 | 50.0 | 396 |
| Rural | 20.9 | 18.7 | 0.8 | 40.4 | 2,285 |
| Region |  |  |  |  |  |
| Hhohho | 22.9 | 19.1 | 0.8 | 42.8 | 697 |
| Manzini | 24.1 | 20.1 | 0.9 | 45.1 | 774 |
| Shiselweni | 21.8 | 18.2 | 0.2 | 40.2 | 680 |
| Lubombo | 17.1 | 19.3 | 1.3 | 37.7 | 529 |
| Mother's education ${ }^{2}$ |  |  |  |  |  |
| No education | 20.6 | 18.5 | 1.2 | 40.3 | 179 |
| Lower primary | 24.7 | 23.0 | 0.5 | 48.2 | 191 |
| Higher primary | 20.5 | 22.3 | 0.7 | 43.6 | 539 |
| Secondary | 23.5 | 22.0 | 1.3 | 46.8 | 649 |
| High school | 27.5 | 19.8 | 0.3 | 47.6 | 286 |
| Tertiary | 18.1 | 10.3 | 0.0 | 28.5 | 105 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 21.2 | 21.1 | 1.2 | 43.4 | 641 |
| Second | 21.6 | 16.5 | 0.7 | 38.7 | 647 |
| Middle | 21.0 | 22.3 | 0.7 | 44.0 | 533 |
| Fourth | 24.4 | 18.3 | 0.6 | 43.2 | 489 |
| Highest | 21.1 | 17.5 | 0.8 | 39.4 | 371 |
| Total | 21.8 | 19.2 | 0.8 | 41.8 | 2,681 |

Note: Table is based on children who slept in the household the night before the interview. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using CDC formulas (CDC, 1998). Haemoglobin is measured in grams per decilitre (g/dl). Total includes one child with information missing on mother's education.
${ }^{1}$ Includes children whose mothers are dead
${ }^{2}$ For women who were not interviewed, information is taken from the Household Questionnaire.
Excludes children whose mothers are not listed in the Household Questionnaire

### 11.7.2 Children Age 5-11 and 12-14 Years

Tables 11.8.2 and 11.8.3 show the prevalence of anaemia in children 5-11 years. The proportion of children with some degree of anaemia is 18 percent, and less than 1 percent of children are severely anaemic. The national prevalence of anaemia among children 12-14 years is virtually identical to that among children age 5-11, and a majority of these children are mildly anaemic ( 17 percent).

Variations in the prevalence of anaemia by background characteristics among the children in these age groups are generally similar to those observed among children age 6-59 months.

| Percentage of children age 5-11 years classified as having anaemia, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Anaemia status by haemoglobin level |  |  |  |  |
| Background characteristic | $\begin{gathered} \text { Mild } \\ (10.5-11.4 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | $\begin{gathered} \text { Moderate } \\ (7.5-10.4 \mathrm{~g} / \mathrm{dl}) \\ \hline \end{gathered}$ | Severe (below $7.5 \mathrm{~g} / \mathrm{dl})$ | $\begin{gathered} \text { Any } \\ \text { anaemia } \\ (<12.5 \mathrm{~g} / \mathrm{dl}) \\ \hline \end{gathered}$ | Number of children |
| Sex |  |  |  |  |  |
| Male | 12.7 | 6.0 | 0.6 | 19.2 | 1,018 |
| Female | 11.1 | 5.3 | 0.3 | 16.7 | 1,048 |
| Mother's interview status |  |  |  |  |  |
| Interviewed | 11.7 | 4.9 | 0.6 | 17.3 | 1,078 |
| Not interviewed but in household | 10.8 | 6.9 | 0.0 | 17.6 | 81 |
| Not interviewed, and not in the household ${ }^{1}$ | 12.2 | 6.4 | 0.2 | 18.8 | 907 |
| Residence |  |  |  |  |  |
| Urban | 13.9 | 6.1 | 0.8 | 20.9 | 256 |
| Rural | 11.6 | 5.6 | 0.4 | 17.5 | 1,811 |
| Region |  |  |  |  |  |
| Hhohho | 10.2 | 4.9 | 0.4 | 15.6 | 509 |
| Manzini | 14.1 | 5.8 | 0.4 | 20.2 | 551 |
| Shiselweni | 12.4 | 6.7 | 0.7 | 19.7 | 561 |
| Lubombo | 10.4 | 5.0 | 0.2 | 15.6 | 446 |
| Mother's education ${ }^{1}$ |  |  |  |  |  |
| No education | 11.7 | 5.8 | 0.0 | 17.5 | 180 |
| Lower primary | 18.4 | 8.8 | 0.6 | 27.8 | 129 |
| Higher primary | 9.9 | 3.7 | 0.0 | 13.6 | 324 |
| Secondary | 11.4 | 3.7 | 0.4 | 15.4 | 286 |
| High school | 8.8 | 7.9 | 2.2 | 18.9 | 168 |
| Tertiary | 15.1 | 1.9 | 1.7 | 18.6 | 70 |
| Living arrangements |  |  |  |  |  |
| Living with both parents | 13.2 | 5.2 | 0.2 | 18.6 | 397 |
| Living with father/not mother | 11.1 | 3.6 | 0.7 | 15.4 | 130 |
| Living with mother/not father | 10.8 | 5.1 | 0.8 | 16.6 | 756 |
| Not living with either parent ${ }^{2}$ | 12.3 | 6.7 | 0.1 | 19.1 | 741 |
|  |  |  |  | Continued... |  |


| Table 11.8.2-Continued |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Anaemia status by haemoglobin level (5-11) |  |  | $\begin{gathered} \text { Any } \\ \text { anaemia } \\ (<12.5 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | Number of children |
|  | $\begin{gathered} \text { Mild } \\ (10.5-11.4 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | $\begin{gathered} \text { Moderate } \\ (7.5-10.4 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | Severe (below $7.5 \mathrm{~g} / \mathrm{dl})$ |  |  |
| Orphanhood status |  |  |  |  |  |
| Both parents alive | 12.3 | 5.8 | 0.4 | 18.5 | 1,551 |
| Mother dead/ father alive | 11.3 | 7.9 | 0.0 | 19.3 | 106 |
| Father dead/ mother alive | 10.3 | 3.9 | 0.6 | 14.9 | 334 |
| Both parents dead | 11.7 | 6.1 | 0.0 | 17.7 | 75 |
| OVC status |  |  |  |  |  |
| Orphan ${ }^{3}$ | 10.7 | 5.1 | 0.4 | 16.2 | 516 |
| Vulnerable ${ }^{4}$ | 10.9 | 4.7 | 0.0 | 15.6 | 256 |
| Orphan and vulnerable ${ }^{5}$ | 12.4 | 2.5 | 0.0 | 14.9 | 91 |
| Neither orphan nor vulnerable | 12.5 | 5.8 | 0.5 | 18.8 | 1,386 |
| Total | 11.9 | 5.6 | 0.4 | 17.9 | 2,067 |
| Note: Table is based on children who slept in the household the night before the interview. Prevalence of anaemia is based on haemoglobin levels and is adjusted for altitude using CDC formulas (CDC, 1998). Haemoglobin in measured in grams per decilitre ( $\mathrm{g} / \mathrm{dl}$ ). Total includes one child with information missing on mother's interview status, two children with information missing on mother's education and 42 children with information missing on living arrangements <br> ${ }^{1}$ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire <br> ${ }^{2}$ Includes children whose mothers are dead <br> ${ }^{3}$ Children with one or both parents dead <br> ${ }^{4}$ Children who have a very sick parent, or who live in a household where an adult has been very sick, or has died in the past 12 months <br> ${ }^{5}$ Children who are orphans and/or vulnerable |  |  |  |  |  |

Table 11.8.3 Prevalence of anaemia in children 12-14 years
Percentage of children age 12-14 years classified as having anaemia, by background characteristics, Swaziland 2006-07

| Background characteristic | Anaemia status by haemoglobin level (12-14) |  |  | $\begin{gathered} \text { Any } \\ \text { anaemia } \\ (<12.0 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Mild } \\ (10.0-11.9 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | $\begin{gathered} \text { Moderate } \\ (7.0-9.9 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | Severe (below $7.0 \mathrm{~g} / \mathrm{dl})$ |  |  |
| Sex |  |  |  |  |  |
| Male | 15.0 | 0.9 | 0.2 | 16.1 | 421 |
| Female | 17.9 | 1.1 | 0.0 | 19.0 | 469 |
| Residence |  |  |  |  |  |
| Urban | 16.5 | 1.3 | 0.0 | 17.8 | 91 |
| Rural | 16.5 | 1.0 | 0.1 | 17.6 | 798 |
| Region |  |  |  |  |  |
| Hhohho | 14.9 | 1.2 | 0.0 | 16.1 | 228 |
| Manzini | 17.3 | 1.8 | 0.0 | 19.1 | 266 |
| Shiselweni | 18.9 | 0.6 | 0.0 | 19.5 | 227 |
| Lubombo | 14.4 | 0.0 | 0.5 | 15.0 | 169 |
| Mother's education ${ }^{1}$ |  |  |  |  |  |
| No education | 13.3 | 0.0 | 0.0 | 13.3 | 80 |
| Lower primary | 18.4 | 1.9 | 0.0 | 20.3 | 67 |
| Higher primary | 15.6 | 1.0 | 0.0 | 16.6 | 136 |
| Secondary | 16.4 | 1.1 | 0.0 | 17.5 | 101 |
| High school | (15.0) | (2.4) | (0.0) | (17.4) | 48 |
| Tertiary | (11.5) | (4.4) | (0.0) | (15.9) | 26 |
|  |  |  |  | Continued... |  |


| Background characteristic | Anaemia status by haemoglobin level (12-14) |  |  | $\begin{gathered} \text { Any } \\ \text { anaemia } \\ (<12.0 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Mild } \\ (10.0-11.9 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | $\begin{gathered} \text { Moderate } \\ (7.0-9.9 \mathrm{~g} / \mathrm{dl}) \\ \hline \end{gathered}$ | Severe (below 7.0 $\mathrm{~g} / \mathrm{dl}$ ) |  |  |
| Living arrangement |  |  |  |  |  |
| Living with both parents | 12.9 | 1.8 | 0.0 | 14.7 | 151 |
| Living with father/not mother | 12.5 | 1.6 | 1.3 | 15.4 | 72 |
| Living with mother/not father | 16.6 | 0.7 | 0.0 | 17.3 | 309 |
| Not living with either parent ${ }^{2}$ | 17.8 | 0.5 | 0.0 | 18.3 | 331 |
| Orphanhood status |  |  |  |  |  |
| Both parents alive | 15.9 | 1.1 | 0.2 | 17.2 | 557 |
| Mother dead/father alive | 20.0 | 0.0 | 0.0 | 20.0 | 79 |
| Father dead/mother alive | 18.1 | 1.5 | 0.0 | 19.6 | 186 |
| Both parents dead | 13.3 | 0.0 | 0.0 | 13.3 | 68 |
| OVC status |  |  |  |  |  |
| Orphan ${ }^{3}$ | 17.6 | 0.8 | 0.0 | 18.4 | 333 |
| Vulnerable ${ }^{4}$ | 20.1 | 0.0 | 0.0 | 20.1 | 110 |
| Orphan and vulnerable ${ }^{5}$ | (19.4) | (0.0) | (0.0) | (19.4) | 51 |
| Neither orphan nor vulnerable | 15.3 | 1.2 | 0.2 | 16.8 | 499 |
| Total | 16.5 | 1.0 | 0.1 | 17.6 | 890 |

Note: Table is based on children who slept in the household the night before the interview. Prevalence of anaemia is based on haemoglobin levels and is adjusted for altitude using CDC formulas (CDC, 1998). Haemoglobin is measured in grams per decilitre ( $\mathrm{g} / \mathrm{dl}$ ). Total includes six children with information missing on mother's education and 26 children with information missing on living arrangement
${ }^{1}$ For women who were not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.
${ }^{2}$ Includes children whose mothers are deceased
${ }^{3}$ Children with one or both parents dead
${ }^{4}$ Children who have a very sick parent. or who live in a household where an adult has been very sick, or has died in the past 12 months
${ }^{5}$ Children who are orphans and/or vulnerable

### 11.8 Micronutrient Intake among Children

A serious contributor to childhood morbidity and mortality is micronutrient deficiency. Children can receive micronutrients from foods, food fortification, and direct supplementation. Table 11.9 looks at measures relating to intake of several key micronutrients among children.

### 11.8.1 Consumption of Vitamin A-rich and Iron-rich Foods

Both vitamin A and iron are important to a child's healthy development. Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage. VAD can also increase severity of infections such as measles and diarrhoeal diseases in children and slow recovery from illness. Vitamin A is found in breast milk, other milks, liver, eggs, fish, butter, red palm oil, mangoes, papayas, carrots, pumpkins, and dark green leafy vegetables. The liver can store an adequate amount of the vitamin for four to six months. Periodic dosing (usually every six months) of vitamin A supplements is one method of ensuring that children at risk do not develop VAD.

Iron is essential for cognitive development. Low iron intake also contributes to anaemia. Iron requirements are greatest between the ages of 6 and 11 months, when growth is extremely rapid.

## Table 11.9 Micronutrient intake among children

Among youngest children age $6-35$ months living with their mother, the percentage who consumed vitamin A-rich foods and iron-rich foods in the day and night preceding the survey; and among all children age 6-59 months, percentage given vitamin A supplements in the six months preceding the survey, percentage given iron supplements in the past seven days, percentage given deworming medication in the six months preceding the survey; and among all children age 6-59 months who live in households that were tested for iodized salt, percentage who live in households with adequately iodized salt, by background characteristics, Swaziland 2006-07

| Background characteristic | Among youngest children age 6-35 months living with the mother: |  |  | Among all children age 6-59 months: |  |  |  | Among children age 6-59 months living in households tested for iodized salt |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who consumed foods rich in vitamin A in past 24 hours ${ }^{1}$ | Percentage who consumed foods rich in iron in past 24 hours $^{2}$ | Number of children | Percentage given vitamin A supplements in past 6 months | Percentage given iron supplements in past 7 days | Percentage given deworming medication in past 6 months $^{3}$ | Number of children | Percentage living in households with adequately iodized salt ${ }^{4}$ |  |
| Age in months |  |  |  |  |  |  |  |  |  |
| 6-8 | 49.4 | 24.4 | 157 | 86.2 | 1.5 | 10.6 | 160 | 79.7 | 148 |
| 9-11 | 76.7 | 46.2 | 135 | 87.6 | 2.3 | 21.0 | 141 | 76.9 | 130 |
| 12-17 | 85.0 | 53.0 | 260 | 90.7 | 2.1 | 40.9 | 283 | 76.7 | 272 |
| 18-23 | 85.0 | 56.0 | 216 | 86.5 | 3.2 | 49.2 | 248 | 77.4 | 231 |
| 24-35 | 86.3 | 59.3 | 324 | 85.2 | 2.3 | 57.1 | 483 | 77.8 | 460 |
| 36-47 | na | na | na | 70.8 | 1.7 | 52.7 | 492 | 77.3 | 474 |
| 48-59 | na | na | na | 72.6 | 1.5 | 51.6 | 480 | 81.5 | 447 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 81.7 | 51.0 | 567 | 80.4 | 2.2 | 46.8 | 1,149 | 77.3 | 1,094 |
| Female | 76.5 | 50.0 | 524 | 80.6 | 1.8 | 46.5 | 1,138 | 79.4 | 1,067 |
| Breastfeeding status |  |  |  |  |  |  |  |  |  |
| Breastfeeding | 76.2 | 45.8 | 525 | 90.3 | 2.2 | 29.4 | 539 | 77.8 | 507 |
| Not breastfeeding | 81.7 | 55.0 | 559 | 78.3 | 2.1 | 53.4 | 1,579 | 78.5 | 1,494 |
| Missing | * | * | 8 | 69.6 | 0.7 | 38.8 | 170 | 78.9 | 161 |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |
| 15-19 | 77.1 | 46.9 | 243 | 80.9 | 1.9 | 38.0 | 539 | 76.2 | 500 |
| 20-29 | 77.9 | 50.1 | 559 | 79.8 | 1.4 | 50.4 | 1,142 | 80.3 | 1,091 |
| 30-39 | 84.5 | 54.3 | 268 | 81.8 | 3.1 | 48.6 | 553 | 76.5 | 520 |
| 40-49 |  | * | 22 | 77.2 | 5.3 | 34.1 | 54 | 77.4 | 49 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 80.5 | 60.4 | 209 | 75.8 | 1.7 | 58.5 | 494 | 76.3 | 468 |
| Rural | 78.9 | 48.2 | 883 | 81.8 | 2.1 | 43.4 | 1,793 | 78.9 | 1,693 |
|  |  |  |  |  |  |  |  |  |  |
| Hhohho | 83.7 | 52.7 | 278 | 83.2 | 2.4 | 50.8 | 622 | 84.3 | 610 |
| Manzini | 77.2 | 53.9 | 350 | 82.5 | 2.0 | 52.2 | 702 | 73.1 | 665 |
| Shiselweni | 77.1 | 46.6 | 251 | 80.1 | 1.9 | 40.2 | 500 | 77.5 | 457 |
| Lubombo | 79.2 | 46.7 | 213 | 74.2 | 1.7 | 39.7 | 463 | 78.8 | 430 |
|  |  |  |  |  |  |  |  |  |  |
| No education | 78.4 | 45.9 | 81 | 71.2 | 1.7 | 29.8 | 199 | 78.5 | 192 |
| Lower primary | 84.1 | 41.6 | 98 | 79.2 | 0.6 | 34.4 | 207 | 76.1 | 192 |
| Higher primary | 74.8 | 44.3 | 299 | 82.6 | 2.4 | 40.3 | 606 | 79.7 | 573 |
| Secondary | 79.3 | 52.3 | 371 | 81.5 | 2.3 | 49.5 | 775 | 74.2 | 732 |
| High school | 81.6 | 57.1 | 180 | 82.5 | 1.9 | 57.0 | 353 | 83.2 | 327 |
| Tertiary | 86.2 | 70.6 | 63 | 76.0 | 1.9 | 72.8 | 150 | 85.8 | 145 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 75.1 | 36.1 | 245 | 81.1 | 1.5 | 33.3 | 456 | 75.6 | 418 |
| Second | 82.4 | 46.1 | 240 | 79.1 | 3.7 | 38.6 | 502 | 78.3 | 476 |
| Middle | 76.5 | 50.6 | 224 | 82.9 | 1.1 | 45.0 | 451 | 75.6 | 427 |
| Fourth | 78.3 | 56.8 | 198 | 83.7 | 2.1 | 55.0 | 429 | 81.9 | 408 |
| Highest | 85.0 | 68.7 | 184 | 76.0 | 1.5 | 62.9 | 449 | 80.4 | 432 |
| Total | 79.2 | 50.5 | 1,092 | 80.5 | 2.0 | 46.7 | 2,288 | 78.3 | 2,161 |

Note: Information on vitamin A and iron supplements and deworming medication is based on mother's recall. An asterisk indicates that an estimate is based on fewer than 25 unweighted children and has been suppressed.
na $=$ Not applicable
${ }^{1}$ Includes meat (and organ meat), fish, poultry, eggs, pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, dark green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A
${ }^{2}$ Includes meat, (including organ meat)
${ }^{3}$ Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.
${ }^{4}$ Salt containing 15 parts per million of iodine or more. Excludes children in households in which salt was not tested

The 2006-07 SDHS collected information from mothers on the consumption of foods rich in vitamin A and iron by children under three years. The data were collected for the youngest child under three years, with the reference period being the day and night preceding the interview. The results in Table 11.9 indicate that eight in ten children under three years receive foods rich in vitamin A, while half are getting foods rich in iron.

The largest variation in consumption of vitamin A-rich foods is by children's age. The proportion consuming fruits and vegetables rich in vitamin A increases rapidly with age, from 49 percent among children age 6-8 months to 85 percent among children age 12-17 months. Other differences in the consumption of foods rich in vitamin A across subgroups are typically modest, with between 75 and 85 percent of children in all subgroups consuming vitamin A-rich foods.

Differences in the consumption of foods rich in iron across the subgroups are typically larger than differences in the consumption of food rich in vitamin A (Table 11.9). By age, for example, the proportion consuming iron-rich foods ranges from 24 percent among children age 6-8 months to 59 percent among children age 24-35 months. Less than half of rural children consumed foods rich in iron compared with 60 percent of urban children. The proportion consuming iron-rich foods varies from 46 percent among children whose mothers never attended school to 71 percent among children whose mothers achieved a tertiary education. Similarly, the proportion of children consuming iron-rich foods increases markedly by wealth quintile, from 36 percent among children living in households in the lowest quintile to 69 percent among those in the highest quintile.

The 2006-07 SDHS also collected data on vitamin A and iron supplementation. As shown in Table 11.9, eight in ten children age 6-59 months received vitamin A supplements in the six months preceding the survey. The proportion receiving supplements peaks at 91 percent among children age 12-17 months before falling to around 70 percent among children age 36-59 months. Reflecting age differences, breastfeeding children ( 90 percent) are more likely to have received vitamin A supplements than non-breastfeeding children ( 78 percent). Rural children ( 82 percent) are slightly more likely than urban children ( 76 percent) to have received a supplement. Vitamin A supplementation is highest among children in Hhohho region ( 83 percent) and lowest among those in the Lubombo region ( 74 percent).

In contrast to the comparatively high level of vitamin A supplementation, only 2 percent of young children were reported as having received iron supplements in the seven days prior to the survey.

Infection with helminths or intestinal worms has been shown to have an adverse impact on the physical development of children and is associated with high levels of iron deficiency anaemia and other nutritional deficiencies (Awasthi et al., 2003). Regular treatment with deworming medications is a simple, cost-effective measure to address these infections. Table 11.9 shows that 47 percent of children age 6-59 months in Swaziland received deworming medication in the 6 months prior to the survey. The proportion of children who received the medication increases with children's age, from 11 percent among children age 6-8 months to a peak of 57 percent among children age $24-35$ months. The proportion receiving medication is higher among urban children ( 59 percent) than rural children ( 43 percent). Around half of children in Manzini and Hhohho received deworming medication in the six months before the survey compared with around 40 percent of children in Lubombo and Shiselweni. The likelihood that a child has received deworming medication is directly related to the mother's level of education and the wealth quintile of the household.

Inadequate amounts of iodine in the diet are related to serious health risks for young children. The survey results show that 78 percent of children age 6-59 months live in households with adequately
iodized salt. Manzini had the lowest proportion of children living in households using adequately iodized salt ( 73 percent).

### 11.9 Nutritional Status of Women and Men

Anthropometric data on height and weight were collected for adults as well as for children in the 2006-07 SDHS. Using these data, two indicators of nutritional status are presented: the percentage of women age 15-49 with very short stature (less than 145 cm ) and the body mass index (BMI) for women and men age 15-49. The body mass index (BMI), or the Quetelet index, is used to measure thinness and obesity. BMI is defined as weight in kilogrammes divided by height squared in metres $\left(\mathrm{kg} / \mathrm{m}^{2}\right)$. A cutoff point of 18.5 is used to define thinness or acute undernutrition, and a BMI of 25.0 or above usually indicates overweight or obesity.

Tables 11.10.1 and 11.10.2 present the mean values of the two indicators of nutritional status and the proportions of women and men falling into high-risk categories, by background characteristics. Respondents for whom there was no information on height and/or weight and for whom a BMI could not be estimated are excluded from this analysis. The height analysis is based on 4,855 women; the BMI analysis is based on 4,519 women and 3,969 men.

## Table 11.10.1 Nutritional status of women

Among women age 15-49, the percentage with height under 145 cm , mean body mass index (BMI), and the percentage with specific BMI levels, by background characteristics, Swaziland 2006-07

| Background characteristic | Height |  | Body Mass Index ${ }^{1}$ |  |  |  |  |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Mean <br> Body <br> Mass <br> Index <br> (BMI) | $\frac{\text { Normal }}{\begin{array}{c} \text { 18.5-24.9 } \\ \text { (total } \\ \text { normal) } \end{array}}$ | $\begin{aligned} & <18.5 \\ & \text { (total } \\ & \text { thin) } \end{aligned}$ | Thin | $<17$ (moderately and severely thin) | $\begin{gathered} \text { Ove } \\ \hline \geq 25.0 \\ \text { (total } \\ \text { over- } \\ \text { weight } \\ \text { or obese) } \end{gathered}$ | erweight/ob |  |  |
|  |  |  | $\begin{gathered} \text { 17.0-18.4 } \\ \text { (mildly } \\ \text { thin) } \\ \hline \end{gathered}$ |  |  | $\begin{gathered} 25.0-29.9 \\ \begin{array}{c} \text { (over- } \\ \text { weight) } \end{array} \\ \hline \end{gathered}$ |  |  | $\begin{gathered} \geq 30.0 \\ \text { (obese) } \end{gathered}$ |  |
|  | Percentage below 145 cm | Number of women |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 1.6 | 1,253 | 23.1 | 68.7 | 7.0 | 5.4 | 1.6 | 24.3 | 19.0 | 5.3 | 1,179 |
| 20-29 | 1.1 | 1,724 | 25.3 | 52.0 | 2.5 | 2.3 | 0.2 | 45.5 | 31.3 | 14.2 | 1,536 |
| 30-39 | 1.1 | 1,080 | 28.7 | 29.8 | 1.4 | 1.2 | 0.2 | 68.9 | 30.7 | 38.2 | 1,017 |
| 40-49 | 1.6 | 797 | 30.2 | 22.7 | 1.1 | 0.9 | 0.2 | 76.1 | 28.4 | 47.7 | 788 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 0.8 | 1,269 | 26.9 | 41.5 | 3.0 | 2.5 | 0.6 | 55.5 | 28.0 | 27.6 | 1,183 |
| Rural | 1.5 | 3,585 | 26.2 | 47.9 | 3.2 | 2.6 | 0.6 | 48.8 | 27.3 | 21.6 | 3,336 |
| Region |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 1.1 | 1,299 | 26.8 | 46.1 | 2.0 | 1.8 | 0.2 | 52.0 | 28.4 | 23.6 | 1,209 |
| Manzini | 1.6 | 1,603 | 26.3 | 44.6 | 3.5 | 2.9 | 0.7 | 51.9 | 28.1 | 23.8 | 1,494 |
| Shiselweni | 1.0 | 1,013 | 26.3 | 47.0 | 3.6 | 3.1 | 0.5 | 49.4 | 26.5 | 22.9 | 945 |
| Lubombo | 1.3 | 940 | 26.1 | 48.5 | 3.7 | 2.7 | 1.0 | 47.8 | 26.1 | 21.7 | 870 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 3.4 | 389 | 27.1 | 43.9 | 3.1 | 2.4 | 0.6 | 53.1 | 25.8 | 27.2 | 359 |
| Lower primary | 2.3 | 353 | 26.2 | 43.3 | 4.6 | 3.2 | 1.4 | 52.1 | 29.8 | 22.3 | 319 |
| Higher primary | 1.8 | 1,242 | 25.9 | 50.2 | 3.7 | 3.0 | 0.8 | 46.1 | 25.8 | 20.3 | 1,155 |
| Secondary | 0.8 | 1,649 | 26.3 | 47.5 | 2.8 | 2.2 | 0.6 | 49.7 | 27.1 | 22.6 | 1,544 |
| High school | 0.4 | 864 | 26.2 | 45.8 | 3.4 | 3.3 | 0.1 | 50.8 | 29.0 | 21.8 | 802 |
| Tertiary | 0.6 | 359 | 28.4 | 33.4 | 1.0 | 1.0 | 0.0 | 65.6 | 30.8 | 34.8 | 341 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 1.9 | 770 | 24.7 | 56.3 | 4.6 | 3.4 | 1.2 | 39.1 | 25.6 | 13.4 | 697 |
| Second | 1.4 | 841 | 25.6 | 50.5 | 3.9 | 3.1 | 0.8 | 45.6 | 27.5 | 18.1 | 778 |
| Middle | 1.6 | 946 | 26.3 | 48.7 | 2.9 | 2.7 | 0.2 | 48.4 | 26.5 | 21.8 | 885 |
| Fourth | 1.0 | 1,085 | 26.7 | 43.6 | 2.8 | 2.5 | 0.3 | 53.6 | 29.4 | 24.2 | 1,017 |
| Highest | 0.8 | 1,212 | 27.7 | 37.7 | 2.3 | 1.8 | 0.5 | 60.0 | 27.5 | 32.6 | 1,141 |
| Total | 1.3 | 4,855 | 26.4 | 46.2 | 3.2 | 2.6 | 0.6 | 50.6 | 27.5 | 23.1 | 4,519 |

[^13]${ }^{1}$ Excludes pregnant women and women with a birth in the preceding 2 months

Table 11.10.1 shows that at the national level, 1 percent of women fall below the 145 cm cutoff point for height. There are only minor variations in this indicator across subgroups, with the highest level (3 percent) among women with no education.

The BMI results indicate that only a few women are too thin or malnourished (BMI <18.5). Overall, 3 percent of women age 15-49 are in this category, with less than 1 percent classified as moderately or severely thin (BMI <17). Somewhat surprising, the level of malnutrition among men is higher than that among women. Table 11.10.2 shows that 10 percent of men are assessed as too thin, and 3 percent are considered to be moderately or severely thin. Among both women and men, those age 15-19 and those in the lowest wealth quintile are most likely to be undernourished.

| Table 11.10.2 Nutritional status of men |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among men age 15-49, mean body mass index (BMI), and the percentage with specific BMI levels, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |
| Background characteristic | Mean <br> Body <br> Mass <br> Index <br> (BMI) | Body Mass Index |  |  |  |  |  |  | Number of men |
|  |  | $\frac{\text { Normal }}{18.5-24.9}$ | $<18.5$ (total thin) | Thin$17.0-18.4$ <br> (mildly <br> thin) | $<17$ <br> (moderately and severely thin) | Overweight/obese |  |  |  |
|  |  |  |  |  |  | $\geq 25.0$ |  | $\begin{gathered} \geq 30.0 \\ \text { (obese) } \\ \hline \end{gathered}$ |  |
|  |  |  |  |  |  | overweight or obese) | $\begin{gathered} 25.0-29.9 \\ \text { (over- } \\ \text { weight) } \\ \hline \end{gathered}$ |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 20.2 | 74.8 | 22.6 | 15.8 | 6.8 | 2.6 | 2.0 | 0.6 | 1,290 |
| 20-29 | 22.5 | 81.7 | 4.0 | 3.6 | 0.5 | 14.2 | 12.2 | 2.1 | 1,430 |
| 30-39 | 24.0 | 60.9 | 3.8 | 2.9 | 0.8 | 35.3 | 26.7 | 8.7 | 757 |
| 40-49 | 24.5 | 56.3 | 4.5 | 3.1 | 1.4 | 39.2 | 28.8 | 10.5 | 493 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 23.4 | 66.3 | 6.4 | 4.8 | 1.6 | 27.4 | 19.5 | 7.8 | 1,110 |
| Rural | 21.8 | 74.7 | 11.5 | 8.4 | 3.2 | 13.8 | 11.4 | 2.4 | 2,860 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 22.4 | 70.5 | 9.5 | 6.9 | 2.7 | 19.9 | 15.6 | 4.4 | 1,056 |
| Manzini | 22.5 | 73.4 | 8.3 | 6.1 | 2.2 | 18.4 | 13.7 | 4.6 | 1,275 |
| Shiselweni | 21.7 | 74.1 | 12.8 | 9.6 | 3.3 | 13.0 | 10.8 | 2.2 | 814 |
| Lubombo | 22.3 | 71.4 | 10.8 | 7.7 | 3.1 | 17.8 | 14.0 | 3.8 | 825 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 22.4 | 76.6 | 7.6 | 5.8 | 1.8 | 15.7 | 12.2 | 3.5 | 296 |
| Lower primary | 21.4 | 73.5 | 15.1 | 10.3 | 4.7 | 11.5 | 10.8 | 0.7 | 448 |
| Higher primary | 21.4 | 73.9 | 14.7 | 9.7 | 5.0 | 11.4 | 9.0 | 2.4 | 959 |
| Secondary | 21.9 | 76.5 | 9.9 | 8.0 | 1.9 | 13.6 | 10.6 | 2.9 | 1,136 |
| High school | 23.0 | 73.2 | 4.9 | 4.0 | 0.9 | 21.9 | 17.4 | 4.5 | 802 |
| Tertiary | 25.3 | 46.1 | 5.2 | 3.7 | 1.4 | 48.7 | 33.9 | 14.8 | 328 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 21.1 | 77.9 | 15.8 | 11.1 | 4.7 | 6.3 | 5.3 | 1.0 | 584 |
| Second | 21.4 | 76.7 | 13.7 | 9.7 | 3.9 | 9.6 | 8.1 | 1.5 | 641 |
| Middle | 21.7 | 76.1 | 11.1 | 8.3 | 2.8 | 12.8 | 11.3 | 1.5 | 824 |
| Fourth | 22.4 | 74.8 | 7.2 | 5.0 | 2.2 | 18.1 | 15.4 | 2.7 | 893 |
| Highest | 23.8 | 61.3 | 6.3 | 5.1 | 1.3 | 32.3 | 22.4 | 10.0 | 1,027 |
| Total 15-49 | 22.3 | 72.4 | 10.1 | 7.4 | 2.7 | 17.6 | 13.7 | 3.9 | 3,969 |
| Note: The Body Mass Index ( BMI ) is expressed as the ratio of weight in kilogrammes to the square of height in metres $\left(\mathrm{kg} / \mathrm{m}^{2}\right)$. |  |  |  |  |  |  |  |  |  |

Looking at men and women at the other end of the BMI range, 14 percent of men are considered overweight (BMI 25-29.9), while 4 percent are classified as obese (BMI >30). Among women, 28 percent are overweight, while 23 percent are obese. Among both women and men, the proportion overweight or obese increases with age, peaking at 76 percent among women age 40-49 and 39 percent among men in the same age group. Regardless of gender, urban residents are more likely to be overweight or obese than their rural counterparts. Among both women and men, the likelihood of being overweight or obese is
directly related to household wealth quintile. For example, men in the highest wealth quintile are five times as likely to be overweight or obese as men in the lowest quintile.

### 11.10 Foods Consumed by Mothers

The quality and quantity of foods that mothers consume influences their health and that of their children, especially the health of breastfeeding children. The 2006-07 SDHS included questions on the type of foods consumed by mothers of children under age three during the day and night preceding the interview.

The results in Table 11.11 indicate that most mothers consume foods made from grains (95 percent) on a daily basis, somewhat more than seven in ten consume fruits/vegetables rich in vitamin A ( 74 percent) and foods made with oil/fat or butter ( 72 percent), and 57 percent consume meat/fish/ shellfish or poultry/eggs. Thirty-seven percent eat fruits and vegetables not classified as rich in vitamin A, 34 percent eat foods made from legumes, 31 percent eat foods from roots/tubers, and 24 percent consume cheese or yogurt. Four in ten women eat some type of sugary food. Tea/coffee ( 60 percent) are the most commonly consumed beverages. Only 17 percent of women reported drinking milk.

Table 11.11 Foods consumed by mothers in the day and night preceding the interview
Among mothers age 15-49 with a child under three years living with the mother, the percentage who consumed specific types of foods in the day and night preceding the interview, by background characteristics, Swaziland 2006-07

| Background characteristic | Liquids |  |  | Solid or semi-solid foods |  |  |  |  |  |  |  | Foods <br> made <br> with <br> oil/fat/ <br> butter | Sugary foods | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Foods <br> made <br> from <br> grains | Foods made from roots/ tubers | Foods made from legumes | Meat/ fish/ shellfish/ poultry/ eggs | Cheese/ yogurt | Vitamin <br> A-rich <br> fruits/ <br> vege- <br> tables | Other <br> fruits/ <br> vege- <br> tables | Other solid or semisolid food |  |  |  |
|  | Milk | Tea/ coffee | Other liquids |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 17.7 | 58.8 | 44.3 | 97.0 | 28.9 | 35.7 | 55.7 | 22.7 | 75.9 | 29.2 | 45.7 | 75.8 | 43.1 | 198 |
| 20-29 | 16.5 | 61.6 | 58.1 | 94.8 | 33.1 | 32.8 | 59.0 | 24.3 | 72.2 | 37.1 | 50.8 | 72.3 | 41.1 | 733 |
| 30-39 | 18.3 | 57.6 | 50.5 | 94.3 | 29.1 | 36.9 | 55.0 | 23.9 | 77.1 | 39.4 | 50.9 | 70.1 | 38.8 | 368 |
| 40-49 | 24.0 | 50.4 | 62.0 | 95.8 | 30.4 | 35.7 | 54.1 | 27.0 | 76.7 | 43.7 | 53.2 | 63.3 | 28.0 | 53 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 20.4 | 71.3 | 69.6 | 97.1 | 40.7 | 31.9 | 71.2 | 36.1 | 71.4 | 47.4 | 68.1 | 73.1 | 44.2 | 271 |
| Rural | 16.7 | 56.7 | 50.3 | 94.5 | 28.9 | 35.1 | 53.7 | 21.1 | 74.9 | 34.2 | 45.7 | 71.6 | 39.2 | 1,081 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 17.2 | 69.3 | 56.2 | 93.8 | 31.8 | 37.4 | 58.5 | 24.5 | 77.7 | 38.3 | 58.0 | 68.8 | 45.0 | 348 |
| Manzini | 17.6 | 64.8 | 52.8 | 96.0 | 33.6 | 31.0 | 62.3 | 29.5 | 73.7 | 42.9 | 54.3 | 79.8 | 40.2 | 429 |
| Shiselweni | 24.4 | 55.1 | 50.5 | 94.4 | 28.7 | 33.5 | 53.5 | 23.5 | 72.3 | 32.3 | 40.7 | 65.5 | 44.6 | 308 |
| Lubombo | 9.6 | 44.0 | 57.8 | 95.7 | 29.9 | 37.2 | 51.6 | 15.6 | 72.9 | 30.4 | 44.2 | 70.6 | 29.0 | 267 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 7.3 | 33.6 | 48.0 | 93.1 | 19.9 | 32.3 | 51.5 | 10.0 | 69.4 | 29.3 | 46.7 | 54.9 | 29.9 | 114 |
| Lower primary | 14.6 | 45.8 | 39.1 | 91.2 | 19.2 | 38.3 | 42.5 | 9.5 | 79.7 | 21.0 | 38.2 | 70.1 | 26.5 | 114 |
| Higher primary | 14.1 | 52.6 | 49.8 | 94.4 | 25.2 | 37.0 | 52.0 | 20.4 | 70.3 | 34.5 | 43.6 | 70.8 | 40.4 | 360 |
| Secondary | 16.2 | 66.3 | 56.2 | 95.4 | 33.6 | 32.0 | 58.8 | 24.9 | 74.6 | 35.2 | 52.8 | 74.3 | 44.4 | 460 |
| High school | 22.8 | 70.8 | 61.4 | 97.6 | 39.4 | 35.1 | 66.0 | 30.9 | 76.9 | 47.4 | 56.3 | 74.5 | 40.2 | 232 |
| Tertiary | 45.4 | 79.0 | 73.2 | 96.0 | 57.8 | 32.8 | 76.2 | 60.2 | 82.0 | 61.2 | 70.5 | 83.4 | 51.2 | 72 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 14.1 | 35.1 | 48.1 | 94.6 | 19.6 | 33.9 | 41.4 | 15.0 | 73.8 | 29.6 | 32.7 | 69.8 | 29.1 | 304 |
| Second | 11.5 | 54.2 | 48.3 | 94.8 | 25.2 | 36.0 | 50.3 | 14.9 | 76.8 | 33.2 | 46.2 | 75.3 | 38.5 | 293 |
| Middle | 14.9 | 64.1 | 51.4 | 95.5 | 33.3 | 40.2 | 56.5 | 23.2 | 73.3 | 33.2 | 50.2 | 71.1 | 45.9 | 273 |
| Fourth | 22.6 | 74.7 | 55.5 | 95.8 | 36.5 | 32.3 | 67.0 | 29.9 | 70.1 | 40.6 | 59.5 | 68.1 | 44.5 | 258 |
| Highest | 27.0 | 77.2 | 71.8 | 94.2 | 46.7 | 28.6 | 77.2 | 42.8 | 77.4 | 51.5 | 68.2 | 75.7 | 45.7 | 224 |
| Total | 17.4 | 59.6 | 54.1 | 95.0 | 31.3 | 34.4 | 57.2 | 24.1 | 74.2 | 36.8 | 50.2 | 71.9 | 40.2 | 1,352 |

[^14]
### 11.11 Prevalence of Anaemia in Women and Men

The 2006-07 SDHS collected information on the prevalence of anaemia among women and men age 15 and older. The anaemia results for women and men age $15-49$ are presented in Tables 11.12.1 and 11.12.2. Tables 11.12.3 and 11.12.4 present the anaemia results for women and men age 50 and older.

In these tables, women and men are classified into three groups based on the haemoglobin levels measured in the survey: mild anaemia (10.0-10.9 $\mathrm{g} / \mathrm{dl}$ for pregnant women, $10.0-11.9 \mathrm{~g} / \mathrm{dl}$ for non-pregnant women, and 12.0-12.9 g/dl for men), moderate anaemia (7.0-9.9 g/dl for women and $9.0-11.9 \mathrm{~g} / \mathrm{dl}$ for men), and severe anaemia (less than $7.0 \mathrm{~g} / \mathrm{dl}$ for women and less than $9.0 \mathrm{~g} / \mathrm{dl}$ for men). Appropriate adjustments in these cutoff points were made for respondents living at altitudes above 1,000 metres and respondents who smoke because both of these groups require more haemoglobin in their blood (Centres for Disease Control and Prevention, 1998). ${ }^{2}$

Table 11.12.1 shows that, overall, 30 percent of women have some degree of anaemia, with the majority of these women classified as mildly anaemic (23 percent). Less than 1 percent were considered severely anaemic. Generally, differences in the levels of anaemia among women by background characteristics are small. However, pregnant women are more likely to be anaemic (40 percent) than women who are breastfeeding (29 percent) and women who are neither pregnant nor breastfeeding ( 30 percent). This could be as a result of the high demand of iron and folate during pregnancy.

Table 11.12.1 Prevalence of anaemia in women age 15-49
Percentage of women age 15-49 with anaemia, by background characteristics, Swaziland 2006-07

|  | Anaemia status by |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | haemoglobin level |  |  | Number <br> Background <br> characteristic | Mild <br> anaemia |
| Moderate | Severe <br> anaemia <br> anaemia | Any <br> anaemia | of <br> anemen |  |  |
| Age |  |  |  |  |  |
| $15-19$ | 21.9 | 6.1 | 0.2 | 28.2 | 1,207 |
| $20-29$ | 23.7 | 7.8 | 0.2 | 31.7 | 1,622 |
| $30-39$ | 23.0 | 9.0 | 0.3 | 32.3 | 1,014 |
| $40-49$ | 20.2 | 7.8 | 0.6 | 28.6 | 756 |

## Number of children <br> ever born

0
Maternity status Pregnant Breastfeeding Neither

Smoking status Smokes cigarettes/ tobacco

## Residence

Urban
Rural

## Region

 Hhohho Manzini Shiselweni Lubombo
## Education

 No education Lower primary Higher primary Secondary High school Tertiary
## Wealth quintile

Lowest
Second
Middle
Fourth
Highest
Total 15-49
Note: Prevalence is adjusted for altitude and for smoking status if known
using CDC formulas (CDC, 1998). Total includes one woman with using CDC formulas (CDC, 1998). Total includes one woman with

[^15]The results in Table 11.12.2 indicate that men age 15-49 are substantially less likely than women of the same age to be anaemic. At the national level, 13 percent of these men are anaemic, while less than 1 percent are severely anaemic. Variations in anaemia levels by background characteristics are generally small. However, rates tend to be substantially higher among men with less than a primary education compared with men with a high school or tertiary education.

| Percentage of men age 15-49 with anaemia, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Anaemia status by haemoglobin level |  |  |  |  |
| Background characteristic | Mild anaemia | Moderate anaemia | Severe anaemia | Any anaemia | Number of men |
| Age |  |  |  |  |  |
| 15-19 | 11.1 | 5.1 | 0.2 | 16.3 | 1,243 |
| 20-29 | 5.1 | 3.1 | 0.3 | 8.4 | 1,284 |
| 30-39 | 8.3 | 6.8 | 0.9 | 16.0 | 669 |
| 40-49 | 7.0 | 5.9 | 1.2 | 14.1 | 445 |
| Smoking status |  |  |  |  |  |
| Smokes cigarettes/tobacco | 7.0 | 5.2 | 1.2 | 13.4 | 602 |
| Does not smoke | 8.1 | 4.7 | 0.4 | 13.2 | 3,039 |
| Residence |  |  |  |  |  |
| Urban | 6.7 | 4.3 | 0.4 | 11.4 | 952 |
| Rural | 8.4 | 5.0 | 0.5 | 13.8 | 2,689 |
| Region |  |  |  |  |  |
| Hhohho | 7.3 | 4.3 | 0.4 | 12.0 | 963 |
| Manzini | 8.8 | 5.2 | 0.8 | 14.8 | 1,162 |
| Shiselweni | 7.7 | 5.0 | 0.2 | 12.9 | 752 |
| Lubombo | 7.7 | 4.5 | 0.4 | 12.6 | 765 |
| Highest educational level |  |  |  |  |  |
| No education | 9.2 | 7.1 | 0.1 | 16.3 | 277 |
| Lower primary | 10.1 | 5.8 | 0.0 | 15.9 | 418 |
| Higher primary | 10.5 | 5.5 | 1.0 | 17.0 | 894 |
| Secondary | 8.0 | 4.1 | 0.3 | 12.5 | 1,058 |
| High school | 4.4 | 4.4 | 0.7 | 9.5 | 728 |
| Tertiary | 4.1 | 1.9 | 0.3 | 6.2 | 267 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 8.5 | 5.1 | 0.2 | 13.7 | 564 |
| Second | 7.3 | 5.5 | 0.7 | 13.5 | 600 |
| Middle | 10.7 | 4.7 | 0.4 | 15.8 | 772 |
| Fourth | 7.2 | 5.9 | 0.7 | 13.8 | 815 |
| Highest | 6.4 | 3.1 | 0.4 | 9.9 | 890 |
| Total 15-49 | 7.9 | 4.8 | 0.5 | 13.2 | 3,642 |

Note: Prevalence is adjusted for altitude and for smoking status if known using CDC formulas (CDC, 1998). Total includes one man with information missing on smoking status

Tables 11.12 .3 and 11.12 .4 show the anaemia rates for women and men age 50 and older. The pattern is the reverse of that observed for women and men age 15-49. Men age 50 and older are more likely ( 31 percent) to have some degree of anaemia than women the same age ( 21 percent). Moreover, while none of the women age 50 and older have severe anaemia, 2 percent of men in this age category are severely anaemic. Interestingly, the prevalence of anaemia among older women tends to decline with age, while the level among men increases.

Table 11.12.3 Prevalence of anaemia in women age 50 and older
Percentage of women age $50+$ with anaemia, by background characteristics, Swaziland 2006-07

| Background characteristic | Anaemia status by Haemoglobin level |  | Any anaemia | Number of women |
| :---: | :---: | :---: | :---: | :---: |
|  | Mild anaemia | Moderate anaemia |  |  |
| Age |  |  |  |  |
| 50-54 | 21.5 | 3.7 | 25.1 | 151 |
| 55-59 | 16.8 | 0.9 | 17.7 | 100 |
| 60+ | 16.5 | 4.2 | 20.7 | 361 |
| Residence |  |  |  |  |
| Urban | 17.1 | 2.8 | 19.9 | 75 |
| Rural | 17.9 | 3.6 | 21.5 | 537 |
| Region |  |  |  |  |
| Hhohho | 14.3 | 4.8 | 19.1 | 149 |
| Manzini | 23.3 | 3.1 | 26.3 | 189 |
| Shiselweni | 12.9 | 2.5 | 15.4 | 177 |
| Lubombo | 21.4 | 4.3 | 25.7 | 96 |
| Education |  |  |  |  |
| No education | 18.7 | 4.5 | 23.2 | 254 |
| Lower primary | 15.9 | 3.8 | 19.7 | 143 |
| Higher primary | 19.5 | 1.2 | 20.7 | 138 |
| Secondary | 16.8 | 4.0 | 20.9 | 53 |
| High school | * |  | * | 8 |
| Tertiary | * |  | * | 15 |
| Total 50+ | 17.8 | 3.5 | 21.3 | 612 |

Note: Prevalence is adjusted for altitude and for smoking status if known using CDC formulas (CDC, 1998). An asterisk indicates that an estimate is based on fewer than 25 unweighted women and has been suppressed.

| Percentage of men age 50+ with anaemia, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Anaemia status by haemoglobin level <br> (Men 50+) |  |  |  |  |
| Background characteristic | Mild $(12.0-12.9 \mathrm{~g} / \mathrm{dl})$ | $\begin{gathered} \text { Moderate } \\ (9.0-11.9 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | Severe (below $9.0 \mathrm{~g} / \mathrm{dl}$ ) | $\begin{gathered} \text { Any } \\ \text { anaemia } \\ (<13.0 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | Number of men |
| Age |  |  |  |  |  |
| 50-54 | 10.3 | 14.7 | 1.0 | 26.1 | 102 |
| 55-59 | 16.1 | 7.3 | 1.7 | 25.1 | 68 |
| 60+ | 18.3 | 14.2 | 2.0 | 34.6 | 223 |
| Residence |  |  |  |  |  |
| Urban | 15.7 | 12.1 | 0.0 | 27.8 | 66 |
| Rural | 15.9 | 13.3 | 2.1 | 31.3 | 327 |
| Region |  |  |  |  |  |
| Hhohho | 11.8 | 21.3 | 1.1 | 34.2 | 112 |
| Manzini | 19.5 | 12.5 | 2.1 | 34.0 | 125 |
| Shiselweni | 16.4 | 9.2 | 2.1 | 27.7 | 86 |
| Lubombo | 15.3 | 6.2 | 1.5 | 23.0 | 71 |
| Education |  |  |  |  |  |
| No education | 13.6 | 14.8 | 1.4 | 29.8 | 156 |
| Lower primary | 16.9 | 15.2 | 2.6 | 34.7 | 73 |
| Higher primary | 17.0 | 13.9 | 1.5 | 32.4 | 77 |
| Secondary | 21.9 | 6.7 | 3.0 | 31.6 | 50 |
| High school | * | * | * | * | 11 |
| Tertiary | (10.4) | (6.5) | (0.0) | (16.9) | 25 |
| Total 50+ | 15.9 | 13.1 | 1.7 | 30.7 | 393 |

### 11.12 Micronutrient Intake among Mothers

Adequate micronutrient intake by women has important benefits for both women and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Iron supplementation of women during pregnancy protects mother and infant against anaemia. It is estimated that one-fifth of perinatal mortality and one-tenth of maternal mortality are attributable to iron deficiency anaemia. Anaemia also results in an increased risk of premature delivery and low birth weight. Finally, iodine deficiency is also related to a number of adverse pregnancy outcomes.

Table 11.13 includes a number of measures that are useful in assessing the extent to which women are receiving adequate intake of vitamin A , iron during pregnancy, and iodine. The first indicators focus on the percentages of women with children under age three who reported that they consumed foods rich in vitamin A and iron during the 24 -hour period prior to the interview. The results indicate that, in general, 88 percent of mothers with young children consume vitamin A-rich foods and 57 percent consume iron-rich foods on a daily basis. No major differences are apparent in the consumption of vitamin A-rich foods and iron-rich foods by age. Urban residents are more likely than rural residents to consume foods with these essential micronutrients, with the urban-rural differential being especially notable with respect to the consumption of iron-rich foods. The consumption of vitamin A-rich foods increases from 84 percent among mothers in households in the lowest wealth quintile to 94 percent among mothers in households in the highest wealth quintile. There is a similar pattern in the consumption of iron-rich foods, with the proportion consuming foods rich in iron increasing from 41 percent of mothers in the lowest wealth quintile to 77 percent among those in the highest wealth quintile.

Besides improving food intake, supplementation is an important strategy for addressing micronutrient deficiency. Postpartum supplementation with vitamin A is important to reduce the proportion of women experiencing night blindness. Overall, 44 percent of women who had a birth in fiveyears prior to the SDHS reported that they had received a vitamin A capsule in the two months following the birth of their last child. Night blindness affects a relatively small proportion of women in Swaziland. Table 11.13 shows that, while 8 percent of mothers reported having some difficulty in seeing at night during their last pregnancy, the majority of these women also had difficulty seeing in the daytime; the adjusted proportion of women suffering from night blindness during pregnancy is 2 percent.

Iron supplementation during pregnancy is important to avoid the problems iron deficiency poses for both the woman and her foetus. The SDHS results in Table 11.13 indicate that the majority of women receive iron supplements during pregnancy; seven in ten mothers of children born in the five-year period prior to the SDHS reported they took iron tablets or syrup during pregnancy. About one-third of the mothers took supplements for at least 90 days during their pregnancy.

Infection with intestinal worms is a common cause of iron deficiency anaemia in pregnant women. Thus, the provision of deworming medications can be important in reducing the risk of anaemia among pregnant women. Table 11.13 shows that only 10 percent of women who had a birth during the five years before the survey took deworming medications during their pregnancy. Younger mothers ( 15 percent) and mothers in the Shiselweni region (16 percent) were the most likely to have received deworming medication.

Finally, Table 11.13 shows that 78 percent of women with a child born in the five years preceding the SDHS were living in households with adequately iodized salt.

Table 11.13 Micronutrient intake among mothers
Among women age 15-49 with a child under age three years living with them, the percentage who consumed vitamin A-rich foods and iron-rich foods in the 24 hours preceding the survey; among women age 15-49 with a child born in the past five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child; among mothers age 15-49 who during the pregnancy for the last child born in the five years prior to the survey, the percentage who suffered from night blindness, the percentage who took iron tablets or syrup for specific numbers of days, and the percentage who took deworming medication; and among women age 15-49 with a child born in the past five years, who live in households that were tested for iodized salt, the percentage who live in households with adequately iodized salt, by background characteristics, Swaziland 200607

| Background characteristic | Among women with a child under three years living with them |  |  | Among women with a child born in the past five years |  |  |  |  |  |  |  |  |  | Among women with a child born in the past five years, who live in households that were tested for iodized salt |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Percentage who <br> suffered night <br> blindness during <br> pregnancy for <br> last child  <br> Per- <br> centage  |  |  | Number of days women took iron tablets or syrup during pregnancy for last child |  |  |  |  | Percentage of women who took deworming medication during pregnancy for last child | Number of women |  |  |
|  | Percentage who con- | Percentage |  |  |  |  | centage living in house- | Number of women |  |  |  |  |
|  | $\begin{aligned} & \text { vitamin } \\ & \text { A-rich } \\ & \text { foods } \\ & \hline \end{aligned}$ | sumed iron-rich foods | Number of women | vitamin A dose postpartum | blind- <br> ness reported | blindness adjusted |  |  |  |  |  |  | None | <60 | 60-89 | 90+ | Don't know/ missing | $\begin{gathered} \text { adequately } \\ \text { iodized } \\ \text { salt } \end{gathered}$ |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 87.7 | 55.7 | 198 | 49.7 | 7.7 | 0.8 | 10.6 | 25.4 | 8.5 | 36.2 | 19.3 |  |  | 14.6 | 232 | 77.7 | 219 |
| 20-29 | 86.6 | 59.0 | 733 | 43.8 | 7.6 | 2.1 | 9.4 | 30.6 | 5.9 | 34.4 | 19.7 | 9.5 | 1,142 | 78.6 | 1,082 |
| 30-39 | 89.3 | 55.0 | 368 | 41.3 | 9.0 | 1.3 | 11.3 | 31.8 | 5.7 | 30.7 | 20.5 | 10.8 | 612 | 79.2 | 577 |
| 40-49 | 87.7 | 54.1 | 53 | 40.8 | 11.7 | 3.4 | 7.8 | 34.4 | 6.2 | 34.1 | 17.5 | 9.0 | 149 | 75.2 | 143 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 91.2 | 71.2 | 271 | 42.4 | 6.1 | 1.4 | 8.6 | 20.8 | 3.4 | 37.8 | 29.4 | 7.5 | 496 | 77.3 | 475 |
| Rural | 86.6 | 53.7 | 1,081 | 43.9 | 8.9 | 2.0 | 10.4 | 33.6 | 7.0 | 32.2 | 16.8 | 11.3 | 1,638 | 78.7 | 1,547 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 88.9 | 58.5 | 348 | 39.9 | 9.7 | 1.7 | 7.0 | 25.9 | 8.4 | 32.1 | 26.5 | 8.0 | 572 | 84.2 | 559 |
| Manzini | 87.4 | 62.3 | 429 | 44.7 | 7.8 | 1.5 | 8.5 | 21.2 | 6.6 | 45.9 | 17.7 | 8.5 | 668 | 73.9 | 636 |
| Shiselweni | 85.8 | 53.5 | 308 | 39.8 | 3.4 | 1.0 | 10.3 | 41.2 | 2.9 | 29.4 | 16.1 | 15.7 | 460 | 79.4 | 421 |
| Lubombo | 88.1 | 51.6 | 267 | 50.4 | 12.4 | 3.4 | 15.6 | 40.3 | 5.7 | 20.7 | 17.8 | 10.9 | 434 | 76.4 | 406 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 85.5 | 51.5 | 114 | 48.4 | 15.6 | 5.2 | 14.6 | 32.3 | 5.1 | 26.0 | 22.0 | 12.4 | 178 | 76.9 | 170 |
| Lower primary | 87.8 | 42.5 | 114 | 48.2 | 11.3 | 1.0 | 14.1 | 31.0 | 4.1 | 35.5 | 15.2 | 14.1 | 177 | 77.3 | 166 |
| Higher primary | 84.3 | 52.0 | 360 | 42.2 | 8.2 | 2.0 | 12.5 | 32.1 | 7.0 | 30.1 | 18.4 | 10.8 | 550 | 79.8 | 522 |
| Secondary | 89.4 | 58.8 | 460 | 42.9 | 7.5 | 1.0 | 8.3 | 31.9 | 6.9 | 34.8 | 18.1 | 10.1 | 716 | 74.9 | 677 |
| High school | 87.2 | 66.0 | 232 | 41.0 | 5.9 | 1.8 | 8.0 | 29.3 | 5.6 | 35.4 | 21.7 | 7.6 | 374 | 81.5 | 352 |
| Tertiary | 95.7 | 76.2 | 72 | 46.4 | 6.3 | 2.1 | 2.2 | 19.9 | 4.2 | 42.5 | 31.3 | 10.7 | 140 | 85.7 | 135 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 83.7 | 41.4 | 304 | 42.6 | 10.0 | 3.0 | 13.5 | 36.2 | 5.4 | 29.8 | 15.2 | 13.4 | 400 | 76.2 | 366 |
| Second | 86.8 | 50.3 | 293 | 42.7 | 10.8 | 3.1 | 13.4 | 29.6 | 7.0 | 32.9 | 17.2 | 12.4 | 429 | 76.9 | 405 |
| Middle | 87.8 | 56.5 | 273 | 41.9 | 9.5 | 1.3 | 9.6 | 31.5 | 6.4 | 31.4 | 21.1 | 9.4 | 419 | 75.5 | 400 |
| Fourth | 87.1 | 67.0 | 258 | 46.2 | 4.7 | 0.4 | 7.5 | 32.7 | 6.7 | 36.8 | 16.3 | 9.7 | 436 | 81.0 | 414 |
| Highest | 93.9 | 77.2 | 224 | 44.1 | 6.6 | 1.4 | 6.2 | 23.9 | 5.3 | 36.3 | 28.4 | 7.4 | 449 | 81.8 | 436 |
| Total | 87.5 | 57.2 | 1,352 | 43.5 | 8.3 | 1.8 | 9.9 | 30.6 | 6.1 | 33.5 | 19.8 | 10.4 | 2,134 | 78.4 | 2,022 |

${ }^{1}$ Includes meat (and organ meat), fish, poultry, eggs, pumpkin, squash, carrots, red sweet potatoes, cassava leaves, spinach, okra, blackjack, pumpkin leaves, mangoes, paw paw, oranges, and guavas
${ }^{2}$ Includes meat (and organ meat), fish, poultry, eggs
${ }^{3}$ In the first two months after delivery
${ }^{4}$ Women who reported night blindness but did not report difficulty with vision during the day
${ }^{5}$ Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis
${ }^{6}$ Salt containing 15 ppm of iodine or more. Excludes women in households where salt was not tested.

## MALARIA AND OTHER HEALTH ISSUES

Africa Magongo

The 2006-07 SDHS collected data to monitor several malaria control programme initiatives, particularly the possession and use of bednets and the coverage of indoor residual house spraying. In addition, the survey obtained information on the prevalence of male circumcision and attitudes concerning it, which has been shown in several recent studies to be related to lower rates of HIV transmission. Finally, the SDHS also included questions on a number of other important health-related issues including the level of awareness and stigma associated with tuberculosis, the prevalence of smoking and alcohol use, and the coverage of health insurance. This chapter considers the information obtained in the SDHS on these topics.

### 12.1 Malaria

Thirty percent of the population in Swaziland is estimated to be at risk of malaria and around 10,000 people are infected with malaria annually (Kunene, 2006). The distribution of malaria varies across the regions, with malaria prevalent in all of the Lubombo region, three-quarters of Manzini, and parts of Shiselweni and Hhohho. Malaria also varies seasonally, peaking in March and April during the rainy season.

The Swaziland government is committed to the control and prevention of malaria. Four interventions are outlined in the National Malaria Control Program (NMCP): 1) indoor residual spraying of houses; 2) clinical management of malaria cases; 3) distribution of insecticide-treated nets (ITNs) among pregnant women and children under five in the most affected areas; and 4) distribution of antimalarial drugs among pregnant women. As a means of providing information on these interventions, the 2006-07 SDHS household survey included questions on ownership of bednets, use of bednets by pregnant women and young children, prophylactic use of antimalarial drugs during pregnancy, and prompt treatment of fever among children under age five.

### 12.1.1 Ownership and Use of Mosquito Nets

Significant advances have been made in the prevention of malaria through the use of insecticidetreated bednets (ITN). Pyrethroids, the chemicals currently used in many countries including Swaziland to treat bednets, mimic the insecticidal compounds of natural pyrethrum. Synthetic pyrethroids have low mammalian toxicity; are repellents, highly toxic to mosquitoes, and odorless; and have low volatility with long persistence. Use of treated bednets has been shown to significantly reduce malaria transmission.

The Government of Swaziland is committed to reaching the Abuja declaration of ensuring that 60 percent of communities have ITNs. To assess progress in achieving the goal, the NMCP had previously conducted periodic surveys to determine net coverage and usage in communities in the sentinel regions targeted through the Roll Back Malaria (RBM) campaign where nets were distributed. The SDHS results presented in Tables 12.1 through 12.3 provide information on ownership of bednets and on the use of the nets by young children and pregnant women for the country as a whole.

Table 12.1 shows the percentages of households owning various types of mosquito nets (treated or untreated) and the average number of nets per household by background characteristics. Overall, 6 percent of households owned some type of mosquito net. Two percent of households owned more than one net. Virtually all of the households with nets had an ever-treated net, i.e., a net that had been pretreated with insecticide or a non-pretreated net that the household had soaked in insecticide at least once. A somewhat smaller proportion of households (4 percent) owned an ITN. A net is considered to be an insecticide-treated net if it was: (1) a factory-treated net that does not require any further treatment; (2) a pretreated net obtained within the past 12 months; or (3) a net that has been soaked with insecticide within the past 12 months.

## Table 12.1 Ownership of mosquito nets

Percentage of households with at least one and more than one mosquito net (treated or untreated), ever-treated mosquito net, and insecticide-treated net (ITN), and the average number of nets per household, by background characteristics, Swaziland 2006-07

| Background characteristic | Any type of mosquito net |  |  | Ever-treated mosquito net ${ }^{1}$ |  |  | Insecticide-treated mosquito nets (ITNs) ${ }^{2}$ |  |  | Number of households |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage with at least one | Percentage with more than one | Average number of nets per household | Percentage with at least one | Percentage with more than one | Average number of ever-treated nets per household | Percentage with at least one | Percentage with more than one | Average number of ITNs per household |  |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 4.9 | 1.5 | 0.1 | 4.7 | 1.3 | 0.1 | 3.2 | 0.9 | 0.0 | 1,565 |
| Rural | 6.7 | 1.8 | 0.1 | 6.5 | 1.7 | 0.1 | 5.0 | 1.3 | 0.1 | 3,278 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 2.4 | 0.8 | 0.0 | 2.4 | 0.8 | 0.0 | 1.6 | 0.7 | 0.0 | 1,370 |
| Manzini | 3.0 | 0.7 | 0.0 | 2.9 | 0.6 | 0.0 | 2.2 | 0.6 | 0.0 | 1,537 |
| Shiselweni | 3.0 | 0.7 | 0.0 | 3.0 | 0.7 | 0.0 | 2.5 | 0.7 | 0.0 | 931 |
| Lubombo | 18.8 | 5.3 | 0.2 | 17.9 | 5.0 | 0.2 | 13.2 | 3.1 | 0.2 | 1,005 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 9.0 | 2.8 | 0.1 | 8.7 | 2.8 | 0.1 | 7.3 | 2.4 | 0.1 | 824 |
| Second | 6.3 | 1.6 | 0.1 | 6.3 | 1.4 | 0.1 | 4.2 | 1.0 | 0.1 | 805 |
| Middle | 4.1 | 1.0 | 0.1 | 3.8 | 1.0 | 0.0 | 2.4 | 0.7 | 0.0 | 866 |
| Fourth | 4.3 | 1.2 | 0.1 | 4.1 | 1.0 | 0.1 | 3.5 | 0.9 | 0.0 | 1,064 |
| Highest | 6.9 | 1.9 | 0.1 | 6.7 | 1.8 | 0.1 | 4.7 | 1.1 | 0.1 | 1,284 |
| Total | 6.1 | 1.7 | 0.1 | 5.9 | 1.6 | 0.1 | 4.4 | 1.2 | 0.1 | 4,843 |

${ }^{1}$ An ever-treated net is a pretreated or a non-pretreated net which has subsequently been soaked with insecticide at any time.
${ }^{2}$ An insecticide-treated net (ITN) is 1) a factory-treated net that does not require any further treatment, 2) a pretreated net obtained within the past 12 months, or 3 ) a net that has been soaked with insecticide within the past 12 months.

Rural households are slightly more likely to own any type of mosquito net than urban households. The Lubombo region has the highest level of ownership of mosquito nets in all categories. Almost one fifth of households in Lubombo own some type of mosquito net; 18 percent have at least one ever-treated mosquito net, and 13 percent have an ITN. It should be noted that Lubombo has the sentinel sites where ITNs are being distributed by the NMCP as part of the RBM campaign.

Tables 12.2 and 12.3 provide information on the percentages of children under five years of age and of all women and pregnant women who slept under a mosquito net (treated or untreated) on the night before the survey, by background characteristics. Overall, net usage is quite low, with less than 1 percent of children and pregnant women sleeping under any type of net on the night before the survey. The Lubombo region has the highest proportions of net usage; however, even in this region, only 2 percent of children under age 5 and 3 percent of pregnant women slept under an ITN on the night before the survey.

| Table 12.2 Use of mosquito nets by children |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of children under five years of age who slept under a mosquito net (treated or untreated), an ever-treated mosquito net, and an insecticidetreated net (ITN) the night before the survey, by background characteristics, Swaziland 2006-07 |  |  |  |  |
| Background characteristic | Percentage who slept under any net last night | Percentage who slept under an ever-treated net last night ${ }^{1}$ | Percentage who slept under an ITN last night ${ }^{2}$ | Number of children |
| Age in months |  |  |  |  |
| <1 | 1.6 | 1.5 | 1.2 | 648 |
| 1 | 0.9 | 0.9 | 0.7 | 629 |
| 2 | 0.7 | 0.7 | 0.6 | 636 |
| 3 | 0.3 | 0.3 | 0.3 | 657 |
| 4 | 0.1 | 0.1 | 0.0 | 699 |
| Sex |  |  |  |  |
| Male | 0.8 | 0.8 | 0.6 | 1,619 |
| Female | 0.6 | 0.6 | 0.5 | 1,649 |
| Residence |  |  |  |  |
| Urban | 1.1 | 0.9 | 0.8 | 567 |
| Rural | 0.7 | 0.7 | 0.5 | 2,702 |
| Region |  |  |  |  |
| Hhohho | 0.1 | 0.1 | 0.0 | 850 |
| Manzini | 0.4 | 0.3 | 0.3 | 972 |
| Shiselweni | 0.8 | 0.8 | 0.7 | 796 |
| Lubombo | 2.0 | 2.0 | 1.5 | 650 |
| Wealth quintile |  |  |  |  |
| Lowest | 1.1 | 1.1 | 0.8 | 746 |
| Second | 0.5 | 0.5 | 0.3 | 757 |
| Middle | 0.6 | 0.6 | 0.4 | 642 |
| Fourth | 0.4 | 0.4 | 0.4 | 611 |
| Highest | 1.2 | 1.0 | 0.9 | 512 |
| Total | 0.7 | 0.7 | 0.6 | 3,268 |

[^16]Table 12.3 Use of mosquito nets by pregnant women
Percentage of all women age 15-49 and pregnant women age 15-49 who slept under a mosquito net (treated or untreated), an ever-treated mosquito net, and an insecticide-treated net (ITN) the night before the survey, by background characteristics, Swaziland 2006-07

| Background characteristic | Percentage of all women age 15-49 who |  |  |  | Percentage of pregnant women age 15-49 who |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Slept under any net last night | Slept under an evertreated net last night ${ }^{1}$ | Slept under an ITN last night ${ }^{2}$ | Number of women | Slept under any net last night | Slept under an evertreated net last night ${ }^{1}$ | Slept under an ITN last night ${ }^{2}$ | Number of women |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 0.7 | 0.6 | 0.5 | 1,464 | 0.8 | 0.8 | 0.8 | 78 |
| Rural | 0.3 | 0.3 | 0.2 | 4,040 | 1.0 | 1.0 | 1.0 | 218 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 0.1 | 0.1 | 0.0 | 1,478 | 0.0 | 0.0 | 0.0 | 74 |
| Manzini | 0.2 | 0.2 | 0.1 | 1,816 | 0.0 | 0.0 | 0.0 | 98 |
| Shiselweni | 0.2 | 0.2 | 0.2 | 1,143 | 1.5 | 1.5 | 1.5 | 63 |
| Lubombo | 1.2 | 1.1 | 1.0 | 1,067 | 3.0 | 3.0 | 3.0 | 61 |
| Education |  |  |  |  |  |  |  |  |
| No education | 0.0 | 0.0 | 0.0 | 412 | (0.0) | (0.0) | (0.0) | 26 |
| Lower primary | 0.9 | 0.9 | 0.9 | 429 | (4.4) | (4.4) | (4.4) | 27 |
| Higher primary | 0.3 | 0.3 | 0.3 | 1,480 | 1.9 | 1.9 | 1.9 | 85 |
| Secondary | 0.3 | 0.3 | 0.2 | 1,841 | 0.0 | 0.0 | 0.0 | 89 |
| High school | 0.5 | 0.5 | 0.3 | 964 | (0.0) | (0.0) | (0.0) | 44 |
| Tertiary | 0.0 | 0.0 | 0.0 | 379 | * | * | * | 25 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 0.4 | 0.4 | 0.4 | 860 | 2.0 | 2.0 | 2.0 | 61 |
| Second | 0.3 | 0.3 | 0.0 | 948 | 0.0 | 0.0 | 0.0 | 56 |
| Middle | 0.3 | 0.3 | 0.3 | 1,072 | 0.0 | 0.0 | 0.0 | 53 |
| Fourth | 0.4 | 0.4 | 0.4 | 1,213 | 2.3 | 2.3 | 2.3 | 57 |
| Highest | 0.5 | 0.4 | 0.3 | 1,411 | 0.4 | 0.4 | 0.4 | 69 |
| Total | 0.4 | 0.4 | 0.3 | 5,503 | 0.9 | 0.9 | 0.9 | 296 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ An ever-treated net is a pretreated or a non-pretreated net which has subsequently been soaked with insecticide at any time.
${ }^{2}$ An insecticide-treated net (ITN) is 1) a factory-treated net that does not require any further treatment, 2) a pretreated net obtained within the past 12 months, or 3 ) a net that has been soaked with insecticide within the past 12 months.

### 12.1.2 Intermittent Preventive Treatment (IPT) by Women during Pregnancy

Malaria during pregnancy is common among women living in countries that are malaria endemic. It is a contributory factor to low birth weight, infant mortality, maternal anaemia, spontaneous abortion, and still birth. The NMCP in Swaziland recommends Intermittent Preventative Treatment (IPT) with chloroquine for pregnant women during antenatal visits as a prophylactic measure during the high malaria transmission period in high malaria areas. The National Malaria Control Program (NMCP) recommends that pregnant women in high malaria areas who come for antenatal care receive prophylactic treatment of an antimalaria drug, usually chloroquine, once at the beginning of the second trimester of pregnancy and once at the beginning of their last trimester.

Table 12.4 provides information on the percentages of women who took any antimalarial drugs for prevention, who took chloroquine, and who received two or more doses of chloroquine for the last live birth in the last two years preceding the survey by background characteristics. Overall, 7 percent of women with a live birth in the two years prior to the survey report that they took antimalarial drugs for prevention. Most women were not able to identify the drug they received. Less than 1 percent of women reported that they received two or more doses of chloroquine during pregnancy and, thus, were classified as receiving Intermittent Preventative Treatment.

Women in the Lubombo region were considerably more likely than women in other regions to have taken an antimalarial drug during pregnancy. Although they were the most likely to have used an antimalarial for prevention, less than 1 percent of women in the Lubombo region reported receiving chloroquine at least twice during pregnancy and were thus considered to have received IPT.

| Table 12.4 Prophylactic use of antimalarial drugs and use of Intermittent |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Preventive Treatment (IPT) by women during pregnancy |  |  |  |  |
| Percentages of women who took any antimalarial drugs for prevention, who took chloroquine, and who received Intermittent Preventive Treatment (IPT) during the pregnancy for their last live birth in the two years preceding the survey, by background characteristics, Swaziland 2006-07 |  |  |  |  |
|  Percentage <br> who took any <br> antimalarial <br> Background <br> characteristic drug |  | Chloroquine |  | Number of women with a live birth in the |
|  |  | Percentage who took chloroquine | Percentage who took $2+$ doses | two years preceding the survey |
| Residence |  |  |  |  |
| Urban | 5.2 | 1.6 | 1.2 | 253 |
| Rural | 7.5 | 0.7 | 0.3 | 910 |
| Region |  |  |  |  |
| Hhohho | 2.6 | 0.4 | 0.0 | 312 |
| Manzini | 6.7 | 1.0 | 0.6 | 354 |
| Shiselweni | 5.6 | 0.0 | 0.0 | 247 |
| Lubombo | 14.5 | 2.2 | 1.4 | 250 |
| Education |  |  |  |  |
| No education | 10.6 | 0.5 | 0.5 | 98 |
| Lower primary | 10.3 | 0.9 | 0.9 | 93 |
| Higher primary | 7.4 | 0.6 | 0.0 | 317 |
| Secondary | 6.3 | 1.1 | 0.7 | 400 |
| High school | 5.6 | 1.1 | 0.5 | 203 |
| Tertiary | 3.2 | 0.9 | 0.9 | 52 |
| Wealth quintile |  |  |  |  |
| Lowest | 9.0 | 0.8 | 0.3 | 254 |
| Second | 5.2 | 0.7 | 0.7 | 243 |
| Middle | 4.1 | 0.5 | 0.0 | 247 |
| Fourth | 9.1 | 1.0 | 1.0 | 223 |
| Highest | 7.9 | 1.5 | 0.5 | 197 |
| Total | 7.0 | 0.9 | 0.5 | 1,163 |
| IPT $=$ Intermittent Preventive Treatment is preventive intermittent treatment with chloroquine during an antenatal care (ANC) visit. |  |  |  |  |

### 12.1.3 Prompt Treatment of Fever in Children

Fever among children in malaria areas is mostly indicative of malaria. It is very important that children with symptoms of fever in such areas be treated promptly and symptomatically for malaria.

Table 12.5 shows the percentage of children under age five with fever in the two weeks preceding the survey, and among children with fever, the percentage who took antimalarial drugs, by background characteristics. More than a quarter ( 28 percent) of the children had had a fever in the two weeks preceding the survey. Fever was more prevalent among children in the Lubombo region than among children in other population subgroups. Most of these children with fever were not given an antimalarial drug to treat the fever. In interpreting these results, it should be noted that the SDHS fieldwork did not occur during the period of high malaria transmission.

| Table 12.5 Prevalence and prompt treatment of fever |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of children under age five with fever in the two weeks preceding the survey, and among children with fever, the percentage who took antimalarial drugs and the percentage who took the drugs the same or next day following the onset of fever, by background characteristics, Swaziland 2006-07 |  |  |  |  |
|  | Among children under age five: |  | Among children under age five with fever: |  |
| Background characteristic | Percentage with fever in the two weeks preceding the survey | Number of children | Percentage who took antimalarial drugs | Number of children |
| Age (in months) |  |  |  |  |
| <12 | 35.3 | 566 | 0.4 | 200 |
| 12-23 | 35.0 | 531 | 1.5 | 186 |
| 24-35 | 24.7 | 483 | 0.7 | 119 |
| 36-47 | 20.5 | 492 | 0.0 | 101 |
| 48-59 | 20.2 | 480 | 0.0 | 97 |
| Sex of preceding birth |  |  |  |  |
| Male | 30.7 | 1,290 | 0.6 | 396 |
| Female | 24.3 | 1,263 | 0.6 | 307 |
| Residence |  |  |  |  |
| Urban | 17.6 | 557 | 1.7 | 98 |
| Rural | 30.3 | 1,996 | 0.5 | 605 |
| Region |  |  |  |  |
| Hhohho | 22.4 | 694 | 1.1 | 156 |
| Manzini | 22.0 | 784 | 0.0 | 173 |
| Shiselweni | 24.0 | 558 | 0.0 | 134 |
| Lubombo | 46.6 | 517 | 1.2 | 241 |
| Mother's education |  |  |  |  |
| No education | 33.5 | 232 | 0.0 | 78 |
| Lower primary | 33.3 | 224 | 0.0 | 75 |
| Higher primary | 31.7 | 668 | 0.6 | 212 |
| Secondary | 24.8 | 865 | 1.6 | 214 |
| High school | 26.5 | 405 | 0.0 | 107 |
| Tertiary | 10.9 | 159 | * | 17 |
| Wealth quintile |  |  |  |  |
| Lowest | 33.6 | 516 | 0.0 | 173 |
| Second | 31.8 | 556 | 0.5 | 177 |
| Middle | 25.6 | 501 | 0.0 | 128 |
| Fourth | 23.7 | 490 | 1.4 | 116 |
| Highest | 22.2 | 490 | 1.9 | 109 |
| Total | 27.5 | 2,553 | 0.6 | 703 |
| Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. |  |  |  |  |

### 12.1.4 Indoor Residual Spraying

Indoor residual spraying is another component of efforts to control malaria transmission in Swaziland. To obtain information on the prevalence of indoor residual spraying, all households interviewed in the SDHS were asked if the interior walls of their dwelling had been sprayed against mosquitoes during the year before the survey and, if yes, who had sprayed the dwelling and how many months it had been since the dwelling had been sprayed.

Table 12.6 shows that 12 percent of households reported that the interior walls of their dwelling had been sprayed, principally as part of a government programme. Indoor spraying rates do not vary much by urban-rural residence. The prevalence of indoor spraying varies from just over 1 percent in Manzini and Shiselweni to 46 percent in Lubombo. Households in the lowest wealth quintile are most likely to report that their house had been sprayed within the year prior to the survey.

| Percentage of households reporting interior walls were sprayed against mosquitoes in the period 0-11 months prior to the survey, by the organisation or individual last spraying the walls, by background characteristics, Swaziland 2006 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage o households reporting interior walls | Percentage of households reporting interior walls sprayed by: |  |  |  | Number of households |
| Background characteristics | sprayed against mosquitoes | Government programme | Private company | Household member/ other | Don't know/ missing |  |
| Residence |  |  |  |  |  |  |
| Urban | 10.6 | 7.5 | 2.3 | 0.3 | 0.5 | 1,565 |
| Rural | 12.4 | 11.4 | 0.5 | 0.2 | 0.3 | 3,278 |
| Region |  |  |  |  |  |  |
| Hhohho | 5.9 | 5.1 | 0.5 | 0.2 | 0.1 | 1,370 |
| Manzini | 1.1 | 0.1 | 0.6 | 0.4 | 0.0 | 1,537 |
| Shiselweni | 1.4 | 1.4 | 0.0 | 0.0 | 0.0 | 931 |
| Lubombo | 45.8 | 40.6 | 3.5 | 0.2 | 1.5 | 1,005 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 19.5 | 18.2 | 0.8 | 0.0 | 0.5 | 824 |
| Second | 14.4 | 13.8 | 0.1 | 0.0 | 0.5 | 805 |
| Middle | 7.8 | 7.2 | 0.1 | 0.3 | 0.1 | 866 |
| Fourth | 7.5 | 6.8 | 0.3 | 0.2 | 0.2 | 1,064 |
| Highest | 11.4 | 7.5 | 3.0 | 0.6 | 0.4 | 1,284 |
| Total | 11.8 | 10.2 | 1.1 | 0.2 | 0.3 | 4,843 |

### 12.2 Male Circumcision

Male circumcision involves the removal of some or all of the foreskin of the penis. Male circumcision is assumed to decrease the risk of HIV infection, in part because of physiological differences that reduce the susceptibility to HIV infection among circumcised men. Several recent studies in subSaharan Africa, including clinical trials conducted in South Africa, Kenya, and Uganda (Auvert et al., 2005; and NIAID, 2006), have documented that the protective effect of male circumcision may be significant.

In 2007, the Government of the Kingdom of Swaziland introduced a policy on male circumcision, which goal is to halt the spread of HIV infection to achieve an HIV-free generation in Swaziland. To meet this objective, male circumcision services, as part of the national comprehensive HIV prevention package, will be available to men of all ages. However, to maximize the public health benefit for HIV prevention, the primary targets of the services are men who are HIV-negative, age 15-24, and newborn babies.

The 2006-07 SDHS collected information on the prevalence of male circumcision and on attitudes relating to the practise. Table 12.7 provides information on the percentage of men age 15-49 circumcised according to selected background characteristics. The table also shows the percent distribution of circumcised men by the age when they were circumcised.

Table 12.7 Male circumcision
Percentage of men age 15-49 who are circumcised and percent distribution of men who are circumcised by age at circumcision, according to background characteristics, Swaziland 2006-07

| Background characteristic | Percentage circumcised | Number ofmen | Circumcised men: age at circumcision |  |  |  | Total | Number of men circumcised |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{array}{r} \text { Below } \\ \text { age } 13 \\ \hline \end{array}$ | $\begin{gathered} 13-19 \\ \text { years old } \\ \hline \end{gathered}$ | 20 or more years | Missing |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 4.2 | 1,323 | 84.2 | 8.8 | na | 7.0 | 100.0 | 55 |
| 20-24 | 6.5 | 886 | 74.9 | 9.1 | 12.3 | 3.7 | 100.0 | 58 |
| 25-29 | 7.9 | 624 | 72.1 | 11.7 | 16.2 | 0.0 | 100.0 | 49 |
| 30-34 | 9.9 | 431 | (55.3) | (24.1) | (20.6) | (0.0) | 100.0 | 43 |
| 35-39 | 19.7 | 367 | 56.9 | 16.4 | 25.6 | 1.1 | 100.0 | 72 |
| 40-44 | 12.5 | 269 | (50.7) | (20.3) | (29.0) | (0.0) | 100.0 | 34 |
| 45-49 | 11.9 | 256 | (38.9) | (7.4) | (50.0) | (3.6) | 100.0 | 30 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 13.3 | 1,181 | 67.5 | 8.8 | 23.7 | 0.0 | 100.0 | 157 |
| Rural | 6.2 | 2,975 | 61.3 | 18.1 | 16.4 | 4.3 | 100.0 | 184 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 9.2 | 1,099 | 66.0 | 13.9 | 18.4 | 1.6 | 100.0 | 101 |
| Manzini | 9.2 | 1,349 | 69.6 | 7.9 | 22.6 | 0.0 | 100.0 | 124 |
| Shiselweni | 6.7 | 843 | 54.2 | 27.3 | 11.1 | 7.4 | 100.0 | 57 |
| Lubombo | 6.9 | 865 | 58.9 | 13.3 | 24.4 | 3.4 | 100.0 | 59 |
| Education |  |  |  |  |  |  |  |  |
| No education | 10.0 | 316 | (48.8) | (12.6) | (35.1) | (3.5) | 100.0 | 32 |
| Lower primary | 8.0 | 470 | (61.7) | (19.2) | (14.3) | (4.8) | 100.0 | 38 |
| Higher primary | 6.7 | 980 | 65.2 | 14.7 | 13.9 | 6.1 | 100.0 | 66 |
| Secondary + | 8.6 | 2,389 | 66.6 | 12.7 | 20.2 | 0.5 | 100.0 | 206 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 5.5 | 601 | (42.8) | (29.1) | (16.3) | (11.7) | 100.0 | 33 |
| Second | 6.3 | 665 | (70.6) | (7.8) | (19.3) | (2.2) | 100.0 | 42 |
| Middle | 6.1 | 856 | (69.6) | (16.9) | (11.4) | (2.1) | 100.0 | 52 |
| Fourth | 9.0 | 953 | 67.7 | 14.5 | 16.5 | 1.4 | 100.0 | 86 |
| Highest | 11.9 | 1,081 | 62.8 | 10.2 | 26.4 | 0.6 | 100.0 | 128 |
| Total 15-49 | 8.2 | 4,156 | 64.1 | 13.8 | 19.8 | 2.3 | 100.0 | 341 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
na $=$ Not applicable

Eight percent of men age 15-49 are circumcised. Older men are markedly more likely than younger men to have been circumcised, with the rate peaking at 20 percent among men age 35-39 years. Urban men ( 13 percent) are more than twice as likely to be circumcised compared with rural men ( 6 percent). The circumcision rate among men is slightly higher in the Hhohho and Manzini regions compared with the rate in Shiselweni and Lubombo. Twelve percent of men in the highest wealth quintile are circumcised compared with 6 percent of men in the bottom three wealth quintiles.

Slightly less than two-thirds of men who were circumcised were less than 13 years old when the circumcision was performed, 14 percent were circumcised between the ages of 13 and 19, and 20 percent were circumcised at age 20 or older. Older men typically report being circumcised at older ages than younger men.

Table 12.8 provides information on men age 15-49 who are not circumcised and who want to be circumcised in the future, according to background characteristics. Four in ten men age 15-49 who are not yet circumcised indicate that they are interested in being circumcised in the future. Looking at the variation with a man's age, the percentage interested in circumcision peaks at just over 50 percent among men age 25-34 years. Urban men are somewhat more likely than rural men to say they want to be circumcised (49 percent and 41 percent, respectively). Men from Shiselweni are noticeably less likely than men from the other regions to want to be circumcised. Men with a secondary or higher education and men in the fourth and fifth wealth quintiles are somewhat more likely to be interested in having a circumcision performed than more disadvantaged men.

| Table 12.8 Desire to be circumcised |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Distribution of men age 15-49 who are not circumcised by desire to be circumcised in the future, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
|  | Desire to be circumcised |  |  |  |  |  |
| Background characteristic | Want to be circumcised | Do not want to be | Don't know | Missing | Total | uncircumcised men |
| Age |  |  |  |  |  |  |
| 15-19 | 36.1 | 61.4 | 2.5 | 0.0 | 100.0 | 1,268 |
| 20-24 | 45.2 | 51.6 | 3.2 | 0.0 | 100.0 | 828 |
| 25-29 | 51.7 | 45.5 | 2.5 | 0.2 | 100.0 | 574 |
| 30-34 | 51.3 | 46.1 | 2.5 | 0.1 | 100.0 | 388 |
| 35-39 | 46.0 | 49.9 | 3.6 | 0.4 | 100.0 | 295 |
| 40-44 | 39.8 | 58.2 | 2.0 | 0.0 | 100.0 | 235 |
| 45-49 | 37.6 | 57.1 | 5.3 | 0.0 | 100.0 | 226 |
| Residence |  |  |  |  |  |  |
| Urban | 49.1 | 47.4 | 3.3 | 0.2 | 100.0 | 1,024 |
| Rural | 40.9 | 56.4 | 2.7 | 0.0 | 100.0 | 2,791 |
| Region |  |  |  |  |  |  |
| Hhohho | 44.5 | 52.2 | 3.2 | 0.1 | 100.0 | 998 |
| Manzini | 46.4 | 50.1 | 3.5 | 0.0 | 100.0 | 1,224 |
| Shiselweni | 36.2 | 61.1 | 2.6 | 0.1 | 100.0 | 787 |
| Lubombo | 42.9 | 55.2 | 1.9 | 0.0 | 100.0 | 805 |
| Education |  |  |  |  |  |  |
| No education | 36.5 | 59.6 | 3.8 | 0.0 | 100.0 | 285 |
| Lower primary | 35.6 | 60.6 | 3.8 | 0.0 | 100.0 | 432 |
| Higher primary | 37.4 | 60.0 | 2.6 | 0.0 | 100.0 | 915 |
| Secondary + | 47.8 | 49.4 | 2.7 | 0.1 | 100.0 | 2,183 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 35.8 | 62.2 | 2.1 | 0.0 | 100.0 | 569 |
| Second | 36.9 | 59.9 | 3.2 | 0.0 | 100.0 | 623 |
| Middle | 43.8 | 53.5 | 2.7 | 0.0 | 100.0 | 804 |
| Fourth | 46.8 | 50.0 | 3.2 | 0.1 | 100.0 | 866 |
| Highest | 47.5 | 49.2 | 3.1 | 0.2 | 100.0 | 952 |
| Total 15-49 | 43.1 | 54.0 | 2.9 | 0.1 | 100.0 | 3,815 |

The SDHS also included several questions to ascertain the reasons men have for wanting and not wanting to be circumcised (data not shown in table). The majority of men who already are circumcised cite health/hygiene ( 74 percent) as the principal reason for the decision to be circumcised. Health/hygiene is also the factor motivating the vast majority of men who had not yet been circumcised but said they would like to have the procedure performed ( 96 percent). Men who do not want to be circumcised most often mention the pain ( 52 percent) involved in the procedure as the reason they do not want to be circumcised. Other reasons these men cited included concern about the physical changes involved in the procedure (11 percent), tradition/religion (10 percent), fear (6 percent), and older age (6 percent).

### 12.3 Health Insurance Coverage

Health insurance can enhance an individual's access to health care. Tables 12.9.1 and 12.9.2 show that only a small minority of women and men age 15-49 in Swaziland are covered by any type of health insurance. Men are somewhat more likely than women to have coverage ( 8 percent and 5 percent, respectively). Among men, health insurance coverage increases markedly with age while the pattern is less uniform among women. Among both women and men, coverage is most frequent for urban residents, those with a tertiary education, and those in the highest wealth quintile.

| Table 12.9.1 Health insurance coverage: Women |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-49 with specific types of health insurance coverage, according to background characteristics, Swaziland 2006 |  |  |  |  |  |  |
| Background characteristic | Employer based | Self | Employer and self | Other | None | Number |
| Age |  |  |  |  |  |  |
| 15-19 | 0.8 | 0.9 | 0.3 | 1.2 | 96.8 | 1,274 |
| 20-24 | 0.9 | 1.0 | 0.3 | 0.5 | 97.3 | 1,046 |
| 25-29 | 0.2 | 1.1 | 0.5 | 0.3 | 97.8 | 729 |
| 30-34 | 2.2 | 2.6 | 2.3 | 0.6 | 92.5 | 616 |
| 35-39 | 2.4 | 2.5 | 3.6 | 0.3 | 91.2 | 503 |
| 40-44 | 1.3 | 2.1 | 1.6 | 0.4 | 94.5 | 438 |
| 45-49 | 1.4 | 3.3 | 1.4 | 0.1 | 93.7 | 383 |
| Residence |  |  |  |  |  |  |
| Urban | 2.9 | 4.2 | 2.7 | 1.9 | 88.4 | 1,330 |
| Rural | 0.6 | 0.7 | 0.5 | 0.2 | 98.1 | 3,657 |
| Region |  |  |  |  |  |  |
| Hhohho | 1.0 | 2.0 | 1.9 | 1.0 | 94.2 | 1,340 |
| Manzini | 1.3 | 2.6 | 1.4 | 0.4 | 94.3 | 1,647 |
| Shiselweni | 0.4 | 0.2 | 0.2 | 0.1 | 99.1 | 1,033 |
| Lubombo | 2.1 | 0.9 | 0.4 | 1.1 | 95.5 | 966 |
| Education |  |  |  |  |  |  |
| No education | 0.4 | 0.4 | 0.0 | 0.0 | 99.2 | 402 |
| Lower primary | 0.8 | 0.0 | 0.3 | 0.1 | 98.8 | 360 |
| Higher primary | 0.8 | 0.2 | 0.3 | 0.0 | 98.7 | 1,268 |
| Secondary | 0.9 | 1.2 | 0.4 | 0.5 | 96.9 | 1,693 |
| High school | 1.6 | 1.8 | 1.7 | 1.5 | 93.5 | 894 |
| Tertiary | 3.9 | 10.7 | 7.3 | 2.3 | 75.7 | 370 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 0.2 | 0.2 | 0.1 | 0.0 | 99.5 | 785 |
| Second | 0.0 | 0.3 | 0.0 | 0.0 | 99.7 | 862 |
| Middle | 0.4 | 0.3 | 0.1 | 0.5 | 98.7 | 968 |
| Fourth | 0.9 | 0.9 | 0.5 | 0.1 | 97.7 | 1,111 |
| Highest | 3.4 | 5.0 | 3.7 | 2.1 | 85.9 | 1,262 |
| Total | 1.2 | 1.6 | 1.1 | 0.6 | 95.5 | 4,987 |


| Table 12.9.2 Health insurance coverage: Men |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of men age 15-49 with specific types of health insurance coverage, according to background characteristics, Swaziland 2006 |  |  |  |  |  |  |
| Background characteristic | Employerbased | Self | Employer and self | Other | None | Number |
| Age |  |  |  |  |  |  |
| 15-19 | 0.4 | 0.7 | 0.0 | 2.6 | 96.3 | 1,323 |
| 20-24 | 1.2 | 0.9 | 0.4 | 2.7 | 94.8 | 886 |
| 25-29 | 6.1 | 1.3 | 1.2 | 0.9 | 90.5 | 624 |
| 30-34 | 5.4 | 0.8 | 1.0 | 1.5 | 91.3 | 431 |
| 35-39 | 7.4 | 2.2 | 4.1 | 0.8 | 85.6 | 367 |
| 40-44 | 11.2 | 1.9 | 3.0 | 2.8 | 81.1 | 269 |
| 45-49 | 8.7 | 3.6 | 3.5 | 1.3 | 82.9 | 256 |
| Residence |  |  |  |  |  |  |
| Urban | 9.1 | 2.7 | 2.7 | 4.4 | 81.1 | 1,181 |
| Rural | 1.7 | 0.6 | 0.5 | 1.1 | 96.1 | 2,975 |
| Region |  |  |  |  |  |  |
| Hhohho | 4.2 | 1.3 | 1.3 | 1.6 | 91.7 | 1,099 |
| Manzini | 2.8 | 1.7 | 1.2 | 3.4 | 90.8 | 1,349 |
| Shiselweni | 1.2 | 0.5 | 0.7 | 0.2 | 97.4 | 843 |
| Lubombo | 7.4 | 1.1 | 1.3 | 2.1 | 88.1 | 865 |
| Education |  |  |  |  |  |  |
| No education | 5.0 | 0.9 | 0.8 | 0.0 | 93.3 | 316 |
| Lower primary | 2.6 | 0.3 | 0.2 | 0.4 | 96.5 | 470 |
| Higher primary | 2.8 | 0.6 | 0.4 | 0.6 | 95.7 | 980 |
| Secondary | 2.6 | 0.8 | 0.3 | 2.4 | 93.9 | 1,191 |
| High school | 4.6 | 1.5 | 1.2 | 3.0 | 89.7 | 852 |
| Tertiary | 9.1 | 5.5 | 7.8 | 6.2 | 71.3 | 347 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 0.9 | 0.5 | 0.0 | 0.7 | 97.9 | 601 |
| Second | 0.9 | 0.0 | 0.3 | 0.3 | 98.5 | 665 |
| Middle | 1.8 | 0.4 | 0.5 | 0.6 | 96.7 | 856 |
| Fourth | 4.1 | 0.8 | 0.3 | 1.2 | 93.6 | 953 |
| Highest | 8.5 | 3.4 | 3.5 | 5.7 | 78.9 | 1,081 |
| Total 15-49 | 3.8 | 1.2 | 1.1 | 2.0 | 91.8 | 4,156 |

### 12.4 KnOWLeDGE and Attitudes Towards Tuberculosis

Tuberculosis (TB) is considered to be among the top public health problems in Swaziland. The SDHS obtained information from respondents about whether they had heard about TB and, if so, how it was transmitted. Respondents who knew about TB were also asked if they believed it could be cured. In addition, to assess attitudes toward the illness, respondents knowing about TB were questioned about whether or not they would want to keep it secret if a family member had TB.

According to the results in Tables 12.10 .1 and 12.10.2, virtually all women and men age 15-49 in Swaziland have heard about TB. Around eight in ten women and men who had heard of TB also correctly identify that TB can be spread through the air when an infected individual coughs or sneezes. Among those knowing about TB, 91 percent of women and 87 percent of men believe it can be cured. Regardless of their sex, urban residents are somewhat more knowledgeable than rural residents about the way TB is transmitted and the fact that TB is curable. Knowledge levels tend to rise with education and wealth among both women and men.

The SDHS also found that relatively little stigma is attached to TB, as evidenced by the fact that if a family member had TB, only one in ten women and men say they would prefer to keep it a secret. There was little variation in this percentage by background characteristics.

## Table 12.10.1 Knowledge and attitudes concerning tuberculosis: Women

Percentage of women age 15-49 who have heard of tuberculosis (TB), and among women who have heard of TB, the percentage who know that TB is spread through the air by coughing, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Swaziland 2006

| Background characteristic | Among all respondents |  | Among respondents who have heard of TB |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Percentage who report that | Percentage | Percentage who would |  |
|  | Percentage who have heard of TB | Number | TB is spread through the air by coughing | who believe that TB can be cured | want a family member's TB kept secret | Number |
| Age |  |  |  |  |  |  |
| 15-19 | 95.9 | 1,274 | 80.2 | 81.1 | 17.0 | 1,221 |
| 20-24 | 98.3 | 1,046 | 81.9 | 92.4 | 9.1 | 1,028 |
| 25-29 | 98.6 | 729 | 84.9 | 94.2 | 8.1 | 719 |
| 30-34 | 98.2 | 616 | 86.9 | 96.3 | 6.4 | 605 |
| 35-39 | 98.3 | 503 | 83.1 | 94.2 | 9.4 | 494 |
| 40-44 | 98.6 | 438 | 82.4 | 94.3 | 5.1 | 432 |
| 45-49 | 97.2 | 383 | 77.5 | 94.5 | 7.8 | 372 |
| Residence |  |  |  |  |  |  |
| Urban | 98.7 | 1,330 | 87.2 | 93.4 | 8.3 | 1,312 |
| Rural | 97.3 | 3,657 | 80.6 | 89.9 | 10.9 | 3,558 |
| Region |  |  |  |  |  |  |
| Hhohho | 97.7 | 1,340 | 83.7 | 91.2 | 11.3 | 1,310 |
| Manzini | 97.6 | 1,647 | 86.3 | 91.9 | 9.1 | 1,608 |
| Shiselweni | 97.8 | 1,033 | 79.7 | 89.8 | 10.7 | 1,011 |
| Lubombo | 97.5 | 966 | 76.8 | 89.5 | 9.9 | 942 |
| Education |  |  |  |  |  |  |
| No education | 95.2 | 402 | 64.2 | 85.6 | 11.5 | 383 |
| Lower primary | 92.7 | 360 | 69.3 | 86.2 | 13.4 | 333 |
| Higher primary | 97.2 | 1,268 | 78.3 | 88.9 | 14.0 | 1,233 |
| Secondary | 98.4 | 1,693 | 85.9 | 90.5 | 9.6 | 1,665 |
| High school | 99.6 | 894 | 89.3 | 95.6 | 6.6 | 891 |
| Tertiary | 98.9 | 370 | 94.3 | 96.6 | 4.7 | 366 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 95.5 | 785 | 70.8 | 87.1 | 13.3 | 749 |
| Second | 96.4 | 862 | 78.0 | 89.7 | 10.9 | 831 |
| Middle | 98.2 | 968 | 83.7 | 91.4 | 10.1 | 951 |
| Fourth | 98.3 | 1,111 | 85.2 | 91.2 | 10.0 | 1,092 |
| Highest | 98.9 | 1,262 | 88.8 | 93.0 | 8.0 | 1,248 |
| Total | 97.7 | 4,987 | 82.4 | 90.8 | 10.2 | 4,871 |

Table 12.10.2 Knowledge and attitudes concerning tuberculosis: Men
Percentage of men age 15-49 who have heard of tuberculosis (TB), and among men who have heard of TB, the percentage who know that TB is spread through the air by coughing, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Swaziland 2006

| Background characteristic | Among all respondents |  | Among respondents who have heard of TB: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Percentage who report that TB is spread through the air by coughing | Percentage who believe that TB can be cured | Percentage who would want a family member's TB kept secret | Number |
|  | Percentage who have heard of TB | Number |  |  |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 96.7 | 1,323 | 79.1 | 75.5 | 16.2 | 1,279 |
| 20-24 | 98.0 | 886 | 80.4 | 87.7 | 9.7 | 869 |
| 25-29 | 98.9 | 624 | 80.6 | 92.2 | 7.6 | 617 |
| 30-34 | 98.4 | 431 | 80.2 | 95.0 | 5.6 | 424 |
| 35-39 | 98.3 | 367 | 80.3 | 94.7 | 4.5 | 361 |
| 40-44 | 99.3 | 269 | 74.7 | 92.3 | 7.3 | 267 |
| 45-49 | 99.7 | 256 | 68.7 | 95.0 | 6.4 | 255 |
| Residence |  |  |  |  |  |  |
| Urban | 98.7 | 1,181 | 83.7 | 90.8 | 8.1 | 1,166 |
| Rural | 97.7 | 2,975 | 76.9 | 85.0 | 11.0 | 2,906 |
| Region |  |  |  |  |  |  |
| Hhohho | 98.4 | 1,099 | 79.6 | 90.3 | 8.7 | 1,082 |
| Manzini | 98.5 | 1,349 | 80.6 | 84.1 | 9.6 | 1,328 |
| Shiselweni | 97.1 | 843 | 77.8 | 85.3 | 11.0 | 819 |
| Lubombo | 97.5 | 865 | 76.2 | 87.5 | 12.2 | 843 |
| Education |  |  |  |  |  |  |
| No education | 95.2 | 316 | 52.7 | 82.7 | 10.9 | 301 |
| Lower primary | 95.1 | 470 | 61.1 | 79.5 | 14.9 | 447 |
| Higher primary | 97.1 | 980 | 73.9 | 80.6 | 12.8 | 952 |
| Secondary | 99.0 | 1,191 | 84.1 | 87.4 | 9.4 | 1,179 |
| High school | 99.6 | 852 | 89.3 | 93.3 | 7.3 | 848 |
| Tertiary | 99.5 | 347 | 94.7 | 98.0 | 6.0 | 345 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 96.2 | 601 | 66.5 | 84.9 | 12.1 | 578 |
| Second | 97.8 | 665 | 74.7 | 82.6 | 12.0 | 651 |
| Middle | 97.7 | 856 | 78.1 | 84.5 | 11.5 | 836 |
| Fourth | 97.8 | 953 | 80.0 | 86.7 | 10.5 | 932 |
| Highest | 99.4 | 1,081 | 87.6 | 91.9 | 6.6 | 1,075 |
| Total 15-49 | 98.0 | 4,156 | 78.9 | 86.7 | 10.2 | 4,072 |

### 12.5 Use Of Tobacco

The use of tobacco negatively affects a person's health. Moreover, even if an individual does not smoke tobacco but other household members do within the home, all members of the household are exposed to second-hand tobacco smoke or "environmental" tobacco smoke (ETS). ETS contributes to a number of adverse health effects including increased risk of respiratory and cardiovascular illnesses, especially for young children (WHO, 1999).

The 2006-07 SDHS collected information on women's and men's use of tobacco. Table 12.10 presents these findings.

Overall, 2 percent of women age 15-49 smoke cigarettes or use some form of tobacco, compared with 22 percent of men. The small number of women who reported tobacco use were as likely to use some other form of tobacco as to smoke cigarettes. Among men, 14 percent smoke cigarettes and 8 percent use other forms of tobacco. Among men who smoke cigarettes, 24 percent smoked 1-2 cigarettes in the 24 hours preceding the survey, 35 percent smoked $3-5$ cigarettes, and 31 percent smoked 6 or more cigarettes (data not shown).

Table 12.11 shows that, among women, tobacco use increases with age, although even among women age 40-49, only 6 percent report tobacco use. Tobacco use also rises with age among men, with the age differential being more pronounced among men than women. Around one-third of men age 35-49 use tobacco compared with 3 percent of men age 15-19. Tobacco use does not vary by urban-rural residence. For both women and men, use is highest among those with no education and those in the lowest wealth quintile.

| Table 12.11 Use of tobacco |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men age 15-49 who smoke cigarettes or a pipe or use other tobacco products, according to background characteristics and maternity status, Swaziland 2006 |  |  |  |  |  |  |  |  |  |  |
|  | Women |  |  |  |  | Men |  |  |  |  |
| Background characteristic | Cigarettes | Pipe | Other tobacco | Does not use tobacco | Number of women | Cigarettes | Pipe | Other tobacco | Does not use tobacco | Number of men |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 0.3 | 0.0 | 0.2 | 99.6 | 1,274 | 2.2 | 0.2 | 1.3 | 97.3 | 1,323 |
| 20-24 | 1.2 | 0.2 | 0.3 | 98.6 | 1,046 | 12.6 | 1.1 | 5.7 | 85.7 | 886 |
| 25-29 | 0.9 | 0.1 | 0.6 | 98.4 | 729 | 17.1 | 1.5 | 8.8 | 79.3 | 624 |
| 30-34 | 1.6 | 0.0 | 0.9 | 97.6 | 616 | 22.6 | 2.0 | 11.8 | 72.5 | 431 |
| 35-39 | 2.1 | 0.0 | 1.5 | 96.7 | 503 | 26.4 | 2.3 | 11.6 | 68.4 | 367 |
| 40-44 | 1.8 | 0.0 | 3.6 | 94.4 | 438 | 25.5 | 1.9 | 12.2 | 68.2 | 269 |
| 45-49 | 1.4 | 0.0 | 4.4 | 94.3 | 383 | 25.5 | 5.3 | 9.6 | 69.0 | 256 |
| Maternity status |  |  |  |  |  |  |  |  |  |  |
| Pregnant | 1.3 | 0.0 | 0.6 | 98.0 | 279 | na | na | na | na | na |
| Breastfeeding (not pregnant) | 0.3 | 0.0 | 0.3 | 99.2 | 766 | na | na | na | na | na |
| Neither | 1.3 | 0.1 | 1.3 | 97.5 | 3,942 | na | na | na | na | na |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 2.2 | 0.1 | 0.3 | 97.7 | 1,330 | 15.0 | 0.8 | 6.4 | 83.0 | 1,181 |
| Rural | 0.7 | 0.0 | 1.4 | 97.9 | 3,657 | 13.4 | 1.6 | 6.7 | 83.5 | 2,975 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 1.7 | 0.1 | 0.9 | 97.5 | 1,340 | 15.8 | 1.1 | 7.4 | 81.4 | 1,099 |
| Manzini | 1.2 | 0.1 | 0.6 | 98.3 | 1,647 | 14.4 | 2.1 | 5.5 | 83.6 | 1,349 |
| Shiselweni | 0.5 | 0.0 | 2.0 | 97.5 | 1,033 | 11.1 | 1.4 | 6.0 | 85.5 | 843 |
| Lubombo | 0.9 | 0.0 | 1.4 | 97.8 | 966 | 13.1 | 0.6 | 7.8 | 83.4 | 865 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 1.9 | 0.0 | 5.8 | 92.3 | 402 | 24.1 | 4.0 | 12.4 | 69.7 | 316 |
| Lower primary | 1.0 | 0.0 | 2.8 | 96.3 | 360 | 14.6 | 1.7 | 10.6 | 79.2 | 470 |
| Higher primary | 0.7 | 0.1 | 1.0 | 98.2 | 1,268 | 12.4 | 2.0 | 7.7 | 83.9 | 980 |
| Secondary | 0.8 | 0.0 | 0.4 | 98.9 | 1,693 | 12.1 | 0.6 | 5.1 | 86.4 | 1,191 |
| High school | 1.4 | 0.1 | 0.2 | 98.4 | 894 | 13.1 | 0.9 | 5.1 | 85.4 | 852 |
| Tertiary | 2.5 | 0.0 | 0.0 | 97.5 | 370 | 15.1 | 0.5 | 1.4 | 84.6 | 347 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 0.7 | 0.0 | 2.6 | 96.7 | 785 | 17.2 | 1.6 | 12.9 | 76.7 | 601 |
| Second | 1.0 | 0.0 | 1.1 | 97.7 | 862 | 13.2 | 1.5 | 7.4 | 83.5 | 665 |
| Middle | 0.7 | 0.0 | 1.3 | 98.1 | 968 | 14.1 | 1.8 | 6.9 | 82.6 | 856 |
| Fourth | 1.1 | 0.0 | 0.6 | 98.5 | 1,111 | 13.6 | 1.4 | 5.0 | 84.6 | 953 |
| Highest | 1.9 | 0.2 | 0.5 | 97.7 | 1,262 | 12.3 | 0.7 | 3.7 | 86.5 | 1,081 |
| Total | 1.1 | 0.1 | 1.1 | 97.8 | 4,987 | 13.8 | 1.4 | 6.6 | 83.4 | 4,156 |

# HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOUR 

Rejoice Nkambule

### 13.1 Introduction

Acquired Immune Deficiency Syndrome (AIDS) is caused by a human immunodeficiency virus (HIV) that weakens the immune system, making the body susceptible to and unable to recover from other opportunistic diseases that lead to death. The predominant mode of HIV transmission is through heterosexual contact, followed by perinatal transmission, in which the mother passes the virus to the child during pregnancy, delivery, or breastfeeding. Other modes of transmission are through infected blood, unsafe injections, and various skin-piercing practices.

The future course of Swaziland's AIDS epidemic depends on a number of variables including levels of HIV/AIDS-related knowledge in the general population; social stigmatisation; risk behaviour modification; access to high-quality services for sexually transmitted infections (STI); provision and uptake of HIV testing and counselling; and access to care and antiretroviral therapy (ART), including prevention and treatment of opportunistic infections. The principal objective of this chapter is to establish the prevalence of relevant knowledge, perceptions, and behaviours at the national level and also within geographic and socioeconomic subpopulations. In this way, prevention programmes can target those groups of individuals most in need of information and most at risk of HIV infection.

In this chapter, indicators for HIV/AIDS knowledge, attitudes, and behaviour are presented for the general adult population, including women and men age 15-49 and those age 50 and over. The chapter then focuses on HIV/AIDS knowledge and patterns of sexual activity among young people, as they are the main target of many HIV prevention efforts.

### 13.2 HIV/AIDS Knowledge, Transmission, and Prevention

### 13.2.1 Awareness of HIV and AIDS

SDHS respondents were asked whether they had heard of HIV or AIDS. Those who reported having heard of HIV or AIDS were asked a number of questions about whether and how HIV/AIDS could be avoided.

Table 13.1 shows that knowledge of AIDS in Swaziland is universal. Practically all women and men age 15-49 have heard about AIDS. Among older adults age 50 and over, 96 percent women and 97 percent of men have heard about AIDS. The results show that there are almost no differences in knowledge of AIDS by age, marital status, urban-rural residence, region, education level, or wealth index.

| Table 13.1 Knowledge of AIDS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men age 15-49 who have heard of AIDS by background characteristics and percentage of women and men age 50 and over who have heard of AIDS, Swaziland 2006-07 |  |  |  |  |
|  | Women |  | Men |  |
| Background characteristic | Has heard of AIDS | Number of women | Has heard of AIDS | Number of men |
| Age |  |  |  |  |
| 15-24 | 99.8 | 2,320 | 99.0 | 2,209 |
| 15-19 | 99.8 | 1,274 | 98.6 | 1,323 |
| 20-24 | 99.9 | 1,046 | 99.6 | 886 |
| 25-29 | 99.8 | 729 | 99.5 | 624 |
| 30-39 | 99.6 | 1,118 | 99.8 | 798 |
| 40-49 | 99.6 | 820 | 99.8 | 525 |
| Marital status |  |  |  |  |
| Never married | 99.9 | 2,487 | 99.1 | 2,734 |
| Ever had sex | 100.0 | 1,607 | 99.6 | 1,458 |
| Never had sex | 99.7 | 880 | 98.6 | 1,276 |
| Married/living together | 99.6 | 2,062 | 99.7 | 1,219 |
| Divorced/separated/widowed | 100.0 | 438 | 100.0 | 203 |
| Residence |  |  |  |  |
| Urban | 100.0 | 1,330 | 99.6 | 1,181 |
| Rural | 99.7 | 3,657 | 99.2 | 2,975 |
| Region |  |  |  |  |
| Hhohho | 99.9 | 1,340 | 99.7 | 1,099 |
| Manzini | 99.7 | 1,647 | 99.5 | 1,349 |
| Shiselweni | 99.7 | 1,033 | 99.2 | 843 |
| Lubombo | 99.8 | 966 | 98.8 | 865 |
| Education |  |  |  |  |
| No education | 98.6 | 402 | 97.8 | 316 |
| Lower primary | 99.3 | 360 | 97.5 | 470 |
| Higher primary | 99.8 | 1,268 | 99.3 | 980 |
| Secondary | 99.9 | 1,693 | 99.8 | 1,191 |
| High school | 100.0 | 894 | 100.0 | 852 |
| Tertiary | 100.0 | 370 | 99.9 | 347 |
| Wealth quintile |  |  |  |  |
| Lowest | 99.0 | 785 | 98.5 | 601 |
| Second | 99.9 | 862 | 99.5 | 665 |
| Middle | 99.9 | 968 | 98.8 | 856 |
| Fourth | 99.9 | 1,111 | 99.7 | 953 |
| Highest | 100.0 | 1,262 | 99.7 | 1,081 |
| Total 15-49 | 99.8 | 4,987 | 99.3 | 4,156 |
| Total 50+ | 96.2 | 669 | 97.4 | 444 |

### 13.2.2 Knowledge of HIV Prevention

HIV among adults is most commonly transmitted by heterosexual contact between an infected partner and a non-infected partner. Consequently, HIV prevention programmes focus their messages and efforts on three important types of behaviour: use of condoms; limiting the number of sexual partners or staying faithful to one partner; and, for young persons, delaying sexual debut (abstinence). To ascertain whether the programmes have been effective in communicating these messages, SDHS respondents were specifically asked whether it is possible to reduce the chances of getting HIV by using a condom at every sexual encounter, limiting sexual intercourse to one uninfected partner, and abstaining from sex.

Table 13.2 shows levels of knowledge of the various HIV prevention methods by background characteristics. The data indicate that knowledge of HIV prevention methods is generally high among women and men age 15-49-more than 80 percent for each of the stipulated methods-but lower among women and men age 50 and over. The level of knowledge among women age 15-49 is generally higher than that among men age 15-49. However, older women are less knowledgeable than older men.

Table 13.2 Knowledge of HIV prevention methods
Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, by having one sex partner who is not infected and has no other partners, and by abstaining from sexual intercourse, by background characteristics, and percentage of women and men age 50 and over who know the various HIV prevention methods, Swaziland 2006-07

| Background characteristic | Women |  |  |  |  | Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Using condoms ${ }^{1}$ | Limiting sexual intercourse to one uninfected partner ${ }^{2}$ | Using condoms and limiting sexual intercourse to one uninfected partner ${ }^{1,2}$ | Abstaining from sexual intercourse | Number of women | Using condoms ${ }^{1}$ | Limiting sexual intercourse to one uninfected partner ${ }^{2}$ | Using condoms and limiting sexual intercourse to one uninfected partner ${ }^{1,2}$ | Abstaining from sexual intercourse | Number of men |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 88.7 | 92.3 | 85.1 | 93.8 | 2,320 | 87.1 | 90.6 | 83.0 | 93.2 | 2,209 |
| 15-19 | 86.9 | 90.7 | 82.7 | 93.4 | 1,274 | 86.4 | 89.2 | 81.7 | 92.8 | 1,323 |
| 20-24 | 91.0 | 94.2 | 88.0 | 94.2 | 1,046 | 88.3 | 92.6 | 84.8 | 93.9 | 886 |
| 25-29 | 94.2 | 94.3 | 90.4 | 94.0 | 729 | 87.2 | 91.3 | 83.1 | 93.8 | 624 |
| 30-39 | 92.5 | 93.1 | 88.4 | 95.5 | 1,118 | 88.2 | 92.8 | 85.0 | 93.7 | 798 |
| 40-49 | 90.0 | 93.0 | 86.2 | 94.4 | 820 | 85.6 | 90.0 | 81.6 | 91.4 | 525 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 89.5 | 92.7 | 85.7 | 94.3 | 2,487 | 87.3 | 90.6 | 83.0 | 93.5 | 2,734 |
| Ever had sex | 92.0 | 93.9 | 88.4 | 95.1 | 1,607 | 89.0 | 92.1 | 85.4 | 94.5 | 1,458 |
| Never had sex | 85.0 | 90.6 | 80.8 | 93.0 | 880 | 85.3 | 88.8 | 80.2 | 92.4 | 1,276 |
| Married/living together | 91.7 | 93.5 | 88.4 | 94.2 | 2,062 | 86.8 | 91.8 | 83.5 | 92.9 | 1,219 |
| Divorced/separated/ widowed | 91.5 | 91.0 | 84.8 | 94.4 | 438 | 87.8 | 92.7 | 84.2 | 89.9 | 203 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 93.6 | 95.3 | 90.7 | 95.7 | 1,330 | 88.6 | 91.4 | 84.4 | 93.9 | 1,181 |
| Rural | 89.4 | 92.0 | 85.3 | 93.8 | 3,657 | 86.6 | 90.9 | 82.7 | 92.9 | 2,975 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 91.6 | 93.8 | 88.9 | 94.4 | 1,340 | 88.3 | 93.7 | 85.3 | 94.9 | 1,099 |
| Manzini | 90.9 | 92.7 | 86.8 | 96.0 | 1,647 | 86.9 | 89.1 | 81.9 | 94.2 | 1,349 |
| Shiselweni | 91.2 | 93.1 | 87.2 | 92.1 | 1,033 | 90.1 | 91.1 | 86.4 | 92.5 | 843 |
| Lubombo | 88.0 | 91.6 | 83.4 | 93.8 | 966 | 83.3 | 90.5 | 79.5 | 90.1 | 865 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 84.8 | 85.5 | 77.7 | 88.8 | 402 | 76.2 | 85.2 | 71.0 | 84.6 | 316 |
| Lower primary | 84.6 | 85.8 | 77.7 | 90.3 | 360 | 79.6 | 82.9 | 73.7 | 88.7 | 470 |
| Higher primary | 89.7 | 91.4 | 85.4 | 93.3 | 1,268 | 85.0 | 90.0 | 80.2 | 90.7 | 980 |
| Secondary | 91.6 | 94.4 | 88.4 | 95.0 | 1,693 | 89.4 | 92.6 | 86.1 | 96.1 | 1,191 |
| High school | 93.6 | 96.4 | 91.1 | 97.4 | 894 | 92.4 | 95.0 | 89.6 | 97.0 | 852 |
| Tertiary | 93.9 | 97.1 | 92.3 | 97.0 | 370 | 92.7 | 95.3 | 89.8 | 94.4 | 347 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 85.1 | 88.6 | 79.6 | 90.6 | 785 | 80.3 | 86.9 | 75.5 | 89.3 | 601 |
| Second | 90.1 | 91.3 | 85.7 | 93.6 | 862 | 85.4 | 90.1 | 81.7 | 93.0 | 665 |
| Middle | 89.5 | 92.0 | 85.1 | 94.8 | 968 | 89.0 | 92.2 | 86.4 | 93.1 | 856 |
| Fourth | 92.3 | 94.4 | 89.1 | 94.8 | 1,111 | 88.9 | 91.4 | 84.2 | 94.5 | 953 |
| Highest | 93.5 | 95.9 | 91.3 | 96.3 | 1,262 | 89.0 | 92.6 | 85.1 | 94.3 | 1,081 |
| Total 15-49 | 90.6 | 92.9 | 86.8 | 94.3 | 4,987 | 87.2 | 91.0 | 83.2 | 93.2 | 4,156 |
| Total 50+ | 69.9 | 76.7 | 61.5 | 83.0 | 669 | 71.0 | 83.1 | 65.6 | 85.1 | 444 |
| ${ }^{1}$ Using condoms every time they have sexual intercourse <br> ${ }^{2}$ Partner who has no other partners |  |  |  |  |  |  |  |  |  |  |

There are differentials in knowledge of prevention methods according to level of education and wealth quintile. For example, while 78 percent of women and 71 percent of men with no education know that using condoms and limiting sex to one uninfected partner are ways to avoid HIV transmission, these proportions increase to 92 percent for women and 90 percent for men with tertiary education. A similar growth pattern is seen by wealth quintile. Women and men living in households in the lowest wealth quintile have lower levels of knowledge of HIV prevention methods than those living in households in the highest wealth quintile.

### 13.2.3 Rejection of Misconceptions about HIV/AIDS

In addition to knowing about effective ways to avoid contracting HIV, it is also useful to be able to identify incorrect beliefs about AIDS to eliminate misconceptions. Common misconceptions about HIV and AIDS include the idea that HIV-infected people always appear ill, and the belief that the virus can be transmitted through mosquito or other insect bites, by sharing food with someone who is infected, or by witchcraft or other supernatural means. Other misconceptions include the belief that the virus cannot be transmitted through anal or oral sex and that a person cannot be infected by being exposed to open wounds or sores. Respondents were asked about these misconceptions and the findings are presented in Tables 13.3.1 and 13.3.2.

The results indicate that a high proportion of the Swazi population age 15-49 lack accurate knowledge about the ways in which HIV can and cannot be transmitted. The percentages who correctly say that a healthy-looking person can have HIV, and reject the two most common local misconceptions about the transmission of HIV, are 58 percent for women and 59 percent for men. The figures are lower for persons age 50 and over, 24 percent for women and 31 percent for men. However, it is worth noting that for the indicator about knowing that a healthy-looking person can have HIV, there is a generally high level of knowledge, above 90 percent for those age 15-49 and 79-86 percent for those age 50 and over. The level of education attained and household wealth status both appear to be strongly related to accurate knowledge about ways in which HIV can and cannot be transmitted. The lower the education level and wealth quintile, the lower the level of accurate knowledge about HIV transmission.

About six in ten women and men are aware that HIV can be transmitted through anal sex or oral sex. Correct knowledge with respect to these types of transmission increases with age, education, and wealth status. Urban respondents are more knowledgeable than rural respondents, but there are no significant differences across regions. Older adults (age 50 and over) are less likely to know that the AIDS virus can be transmitted by having anal sex or oral sex.

Almost all women and men say that a person can be infected with the AIDS virus from open wounds or sores of an infected person ( 96 percent for both women and men). The proportions are lower for older adults ( 80 percent for women and 84 percent for men).

About six in ten women and men say that HIV cannot be transmitted through oral and anal sex. Knowledge of these types of transmission increases with age, education and wealth status. Urban respondents are more knowledgeable than rural respondents, but there are no significant differences across regions. Older adults (age 50 or older) are less likely to know that having anal sex or oral sex can transmit HIV.

The data in Tables 13.3.1 and 13.3.2 also provide an assessment of the level of comprehensive knowledge of HIV prevention and transmission. Comprehensive knowledge is defined as knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV, knowing that a healthy-looking person can have HIV and rejecting the two most common local misconceptions about HIV transmission or prevention: that HIV can be transmitted by mosquito bites and by sharing food with a person who has HIV or AIDS. The results indicate that 52 percent of women and 51 percent of men age 15-49 have comprehensive knowledge of HIV prevention and transmission. Comprehensive knowledge levels are lower for those age 50 and over, 21 percent for women and 25 percent for men. The urban population has a higher level of the comprehensive knowledge of HIV than the rural population, and level of education and wealth quintile are directly related to level of comprehensive knowledge of HIV prevention and transmission.

Table 13.3.1 Comprehensive knowledge about AIDS: Women
Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS by background characteristics, and percentage of women age 50 and over rejecting local misconceptions and having comprehensive knowledge about AIDS, Swaziland 2006-07

| Background characteristic | Percentage of respondents who say that: |  |  |  |  |  |  |  | Percentage with a comprehensive knowledge about AIDS | Number <br> of <br> women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A healthylooking person can have the AIDS virus | AIDS <br> cannot be transmitted by mosquito bites | AIDS cannot be transmitted by supernatural means | A person cannot become infected by sharing food with a person who has AIDS | A healthylooking person can have the <br> AIDS virus and who reject the two most common local misconceptions | A person can become infected by having anal sex | A person can become infected by having oral sex | A person <br> can <br> become <br> infected <br> by being <br> exposed <br> to open <br> wounds/ <br> sores |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 96.0 | 66.7 | 93.2 | 85.6 | 59.7 | 51.1 | 57.6 | 95.6 | 52.1 | 2,320 |
| 15-19 | 94.6 | 68.8 | 92.8 | 86.7 | 60.9 | 46.9 | 52.3 | 95.3 | 52.0 | 1,274 |
| 20-24 | 97.7 | 64.1 | 93.8 | 84.2 | 58.3 | 56.3 | 64.0 | 95.9 | 52.2 | 1,046 |
| 25-29 | 98.3 | 67.5 | 92.6 | 85.2 | 61.2 | 62.8 | 67.4 | 95.7 | 57.5 | 729 |
| 30-39 | 96.7 | 65.9 | 92.6 | 80.5 | 56.3 | 66.0 | 70.9 | 96.5 | 52.2 | 1,118 |
| 40-49 | 93.8 | 61.1 | 88.7 | 72.5 | 49.6 | 59.4 | 67.9 | 95.4 | 45.9 | 820 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 95.9 | 69.6 | 93.6 | 87.0 | 62.6 | 53.2 | 60.3 | 95.6 | 55.3 | 2,487 |
| Ever had sex | 96.5 | 66.8 | 93.6 | 85.9 | 60.2 | 55.6 | 64.1 | 95.6 | 54.6 | 1,607 |
| Never had sex | 95.0 | 74.7 | 93.6 | 89.1 | 67.0 | 48.9 | 53.4 | 95.4 | 56.6 | 880 |
| Married/living together | 96.2 | 62.0 | 91.1 | 77.4 | 52.3 | 61.6 | 66.3 | 95.9 | 48.6 | 2,062 |
| Divorced/separated/ widowed | 96.8 | 61.2 | 89.8 | 77.7 | 53.1 | 63.0 | 70.7 | 96.4 | 47.6 | 438 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 98.5 | 74.2 | 94.1 | 87.0 | 68.2 | 68.4 | 70.5 | 97.4 | 62.6 | 1,330 |
| Rural | 95.3 | 62.6 | 91.6 | 80.5 | 53.6 | 53.6 | 61.2 | 95.2 | 48.0 | 3,657 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 97.2 | 69.8 | 93.6 | 82.9 | 61.2 | 58.1 | 64.8 | 96.4 | 55.7 | 1,340 |
| Manzini | 97.0 | 69.8 | 93.5 | 84.6 | 62.4 | 60.8 | 65.6 | 95.6 | 56.1 | 1,647 |
| Shiselweni | 95.0 | 57.0 | 90.3 | 82.8 | 49.9 | 53.4 | 59.6 | 95.5 | 45.8 | 1,033 |
| Lubombo | 94.4 | 62.3 | 90.3 | 76.6 | 52.2 | 55.7 | 63.2 | 95.5 | 45.8 | 966 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 87.8 | 40.6 | 80.7 | 56.9 | 29.9 | 47.8 | 58.0 | 89.5 | 26.3 | 402 |
| Lower primary | 87.8 | 51.0 | 84.2 | 65.2 | 35.1 | 58.1 | 62.3 | 93.0 | 29.6 | 360 |
| Higher primary | 94.7 | 54.9 | 90.9 | 79.3 | 45.6 | 49.5 | 56.8 | 96.8 | 39.8 | 1,268 |
| Secondary | 98.6 | 70.3 | 94.7 | 87.3 | 62.9 | 56.3 | 62.8 | 96.0 | 56.5 | 1,693 |
| High school | 99.3 | 80.0 | 96.7 | 89.8 | 74.1 | 64.4 | 69.6 | 97.1 | 68.9 | 894 |
| Tertiary | 99.6 | 89.0 | 95.4 | 94.8 | 85.5 | 84.0 | 84.8 | 97.4 | 80.5 | 370 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 89.4 | 51.4 | 85.4 | 69.5 | 39.9 | 46.7 | 55.5 | 93.3 | 34.8 | 785 |
| Second | 95.3 | 58.4 | 91.2 | 77.8 | 47.9 | 50.7 | 56.9 | 95.1 | 42.1 | 862 |
| Middle | 97.1 | 64.1 | 93.7 | 81.5 | 55.2 | 53.8 | 62.9 | 96.9 | 50.0 | 968 |
| Fourth | 97.3 | 70.5 | 93.5 | 87.3 | 63.5 | 59.2 | 65.3 | 96.2 | 56.9 | 1,111 |
| Highest | 99.1 | 76.5 | 95.0 | 89.2 | 71.5 | 70.3 | 72.7 | 96.6 | 66.2 | 1,262 |
| Total 15-49 | 96.1 | 65.7 | 92.3 | 82.2 | 57.5 | 57.5 | 63.7 | 95.8 | 51.9 | 4,987 |
| Total 50+ | 78.9 | 39.7 | 72.8 | 44.2 | 23.7 | 41.7 | 48.4 | 80.3 | 20.6 | 669 |

[^17]Table 13.3.2 Comprehensive knowledge about AIDS: Men
Percentage of men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS by background characteristics, and percentage of men age 50 and over rejecting local misconceptions and having comprehensive knowledge about AIDS, Swaziland 2006-07

| Background characteristic | Percentage of respondents who say that: |  |  |  |  |  |  |  | Percentage with a comprehensive knowledge about AIDS | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A healthylooking person can have the AIDS virus | AIDS cannot be transmitted by mosquito bites | AIDS <br> cannot be transmitted by supernatural means | A person cannot become infected by sharing food with a person who has AIDS | A healthylooking person can have the <br> AIDS virus and who reject the two most common local misconceptions | A person <br> can become infected by having anal sex | A person <br> can become infected by having oral sex | A person can become infected by being exposed to open wounds/ sores |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 94.9 | 68.2 | 92.1 | 84.0 | 60.3 | 57.0 | 60.4 | 96.4 | 52.3 | 2,209 |
| 15-19 | 93.5 | 68.5 | 90.8 | 82.6 | 59.1 | 54.0 | 56.1 | 95.9 | 50.4 | 1,323 |
| 20-24 | 97.0 | 67.7 | 94.0 | 86.0 | 62.1 | 61.5 | 66.9 | 97.0 | 55.2 | 886 |
| 25-29 | 98.4 | 64.3 | 95.1 | 85.8 | 59.8 | 61.4 | 71.2 | 95.8 | 53.5 | 624 |
| 30-39 | 96.6 | 66.3 | 90.5 | 80.6 | 59.1 | 63.6 | 71.5 | 94.8 | 52.2 | 798 |
| 40-49 | 94.2 | 59.5 | 87.8 | 73.7 | 49.4 | 57.6 | 65.5 | 94.6 | 43.5 | 525 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 95.2 | 67.7 | 92.2 | 83.9 | 60.2 | 58.2 | 62.7 | 96.2 | 52.3 | 2,734 |
| Ever had sex | 97.2 | 66.4 | 93.0 | 83.9 | 60.2 | 62.2 | 68.3 | 97.2 | 53.8 | 1,458 |
| Never had sex | 92.9 | 69.2 | 91.2 | 83.8 | 60.2 | 53.6 | 56.4 | 95.0 | 50.7 | 1,276 |
| Married/living together | 96.8 | 65.5 | 91.6 | 81.4 | 58.0 | 62.1 | 69.1 | 94.9 | 51.7 | 1,219 |
| Divorced/separated/ widowed | 95.7 | 49.7 | 86.1 | 66.7 | 40.5 | 51.4 | 67.2 | 94.5 | 36.4 | 203 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 97.2 | 73.7 | 93.0 | 87.5 | 67.1 | 67.9 | 70.4 | 96.8 | 58.7 | 1,181 |
| Rural | 95.1 | 63.1 | 91.2 | 80.2 | 55.3 | 55.5 | 62.6 | 95.3 | 48.5 | 2,975 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 97.0 | 69.3 | 94.2 | 84.0 | 61.0 | 61.9 | 69.8 | 95.7 | 54.3 | 1,099 |
| Manzini | 96.2 | 68.0 | 91.7 | 84.1 | 61.3 | 60.0 | 67.3 | 96.5 | 52.7 | 1,349 |
| Shiselweni | 94.5 | 59.5 | 89.6 | 81.2 | 53.5 | 57.6 | 59.6 | 95.4 | 48.6 | 843 |
| Lubombo | 94.2 | 65.6 | 90.6 | 78.5 | 56.4 | 55.1 | 59.8 | 94.9 | 48.3 | 865 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 87.7 | 34.8 | 82.2 | 52.9 | 23.6 | 46.9 | 60.6 | 88.7 | 18.5 | 316 |
| Lower primary | 88.1 | 42.1 | 82.8 | 62.9 | 31.8 | 45.3 | 58.2 | 92.9 | 27.3 | 470 |
| Higher primary | 94.3 | 62.3 | 91.3 | 79.7 | 52.2 | 50.5 | 58.8 | 95.6 | 43.9 | 980 |
| Secondary | 98.2 | 69.9 | 95.4 | 89.7 | 64.6 | 58.4 | 62.3 | 96.7 | 55.6 | 1,191 |
| High school | 99.3 | 81.1 | 94.9 | 92.6 | 75.6 | 72.2 | 73.0 | 98.1 | 70.0 | 852 |
| Tertiary | 99.4 | 88.6 | 93.1 | 92.0 | 82.6 | 82.5 | 83.2 | 97.3 | 74.8 | 347 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 92.4 | 50.2 | 87.5 | 66.1 | 39.5 | 48.8 | 58.2 | 93.6 | 32.5 | 601 |
| Second | 94.9 | 59.8 | 91.3 | 80.9 | 52.6 | 53.8 | 61.8 | 95.8 | 45.5 | 665 |
| Middle | 94.7 | 61.8 | 90.4 | 83.1 | 55.2 | 56.5 | 61.8 | 95.6 | 49.6 | 856 |
| Fourth | 97.2 | 67.9 | 93.6 | 84.2 | 60.4 | 58.4 | 65.8 | 96.5 | 53.0 | 953 |
| Highest | 97.4 | 80.9 | 93.7 | 89.9 | 74.1 | 70.3 | 71.8 | 96.4 | 65.4 | 1,081 |
| Total 15-49 | 95.7 | 66.1 | 91.7 | 82.3 | 58.6 | 59.0 | 64.8 | 95.8 | 51.4 | 4,156 |
| Total 50+ | 85.8 | 44.4 | 75.5 | 55.7 | 31.2 | 40.5 | 54.9 | 83.5 | 24.6 | 444 |

${ }^{1}$ Two most common local misconceptions: AIDS can be transmitted by mosquito bites and by sharing food with a person who has AIDS.
${ }^{2}$ Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

### 13.3 Knowledge of Prevention of Mother-to-Child Transmission of Hiv

Increasing the level of knowledge about the transmission of HIV from mother to child, and increasing the knowledge that use of antiretroviral drugs during pregnancy can reduce the risk of transmission, are critical to reducing mother-to-child transmission of HIV (MTCT). To assess MTCT knowledge, respondents were asked if HIV can be transmitted from a mother to a child through breastfeeding, and whether a mother with HIV can reduce the risk of transmission to the baby by taking certain drugs during pregnancy.

Table 13.4 shows that a relatively high proportion of women and men age $15-49$ are aware that HIV can be transmitted by breastfeeding and that the risk of mother-to-child transmission can be reduced by taking special drugs during pregnancy. Nevertheless, 24 percent of women and 36 percent of men are not aware of this mode of transmission. The level of awareness is lower among women and men age 50 and over. The fact that the risk of mother-to-child transmission of HIV can be reduced by the mother taking special drugs during pregnancy is more widely known among those with higher education than it is among those with less education, although it is still known to the majority of people.

| Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by mother taking special drugs during pregnancy, by background characteristics, and percentage of women and men age 50 and over who know about prevention of mother-to-child transmission of HIV, Swaziland 200607 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women |  |  |  | Men |  |  |  |
| Background characteristic | HIV can be transmitted by breastfeeding | Risk of MTCT can be reduced by mother taking special drugs during pregnancy | $\qquad$ | Number of women | HIV can be transmitted by breastfeeding | Risk of MTCT can be reduced by mother taking special drugs during pregnancy | HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy | Number of men |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 84.5 | 82.1 | 73.2 | 2,320 | 75.7 | 75.5 | 61.1 | 2,209 |
| 15-19 | 82.5 | 76.1 | 67.1 | 1,274 | 76.1 | 74.0 | 60.5 | 1,323 |
| 20-24 | 86.8 | 89.5 | 80.6 | 1,046 | 75.2 | 77.6 | 62.0 | 886 |
| 25-29 | 85.3 | 90.0 | 80.3 | 729 | 72.0 | 82.6 | 64.6 | 624 |
| 30-39 | 85.6 | 88.2 | 78.9 | 1,118 | 78.0 | 83.7 | 69.8 | 798 |
| 40-49 | 83.1 | 83.9 | 74.8 | 820 | 75.3 | 80.3 | 63.8 | 525 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 84.4 | 82.3 | 73.4 | 2,487 | 75.4 | 76.6 | 61.9 | 2,734 |
| Ever had sex | 85.0 | 87.0 | 77.5 | 1,607 | 75.5 | 79.4 | 63.9 | 1,458 |
| Never had sex | 83.2 | 73.8 | 65.9 | 880 | 75.3 | 73.4 | 59.5 | 1,276 |
| Married/living together | 84.8 | 87.7 | 78.5 | 2,062 | 75.5 | 83.7 | 67.4 | 1,219 |
| Divorced/separated/ widowed | 84.9 | 86.5 | 76.5 | 438 | 77.6 | 77.6 | 64.9 | 203 |
| Currently pregnant |  |  |  |  |  |  |  |  |
| Pregnant | 86.7 | 88.4 | 81.3 | 279 | na | na | na | na |
| Not pregnant or not sure | 84.5 | 84.7 | 75.5 | 4,708 | na | na | na | na |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 87.6 | 89.3 | 81.3 | 1,330 | 74.4 | 83.7 | 66.6 | 1,181 |
| Rural | 83.5 | 83.3 | 73.8 | 3,657 | 76.0 | 76.8 | 62.4 | 2,975 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 85.7 | 86.7 | 77.4 | 1,340 | 75.0 | 80.3 | 64.9 | 1,099 |
| Manzini | 86.2 | 85.4 | 78.5 | 1,647 | 75.4 | 79.8 | 64.3 | 1,349 |
| Shiselweni | 82.9 | 84.0 | 73.4 | 1,033 | 74.8 | 78.2 | 62.4 | 843 |
| Lubombo | 82.2 | 82.6 | 71.4 | 966 | 77.2 | 75.5 | 62.3 | 865 |
| Education |  |  |  |  |  |  |  |  |
| No education | 81.4 | 78.5 | 69.2 | 402 | 72.6 | 69.8 | 57.4 | 316 |
| Lower primary | 80.6 | 78.4 | 69.0 | 360 | 75.3 | 71.4 | 59.8 | 470 |
| Higher primary | 83.9 | 80.7 | 71.3 | 1,268 | 78.7 | 74.4 | 62.3 | 980 |
| Secondary | 83.3 | 86.5 | 76.2 | 1,693 | 74.7 | 81.3 | 64.6 | 1,191 |
| High school | 89.0 | 89.6 | 82.8 | 894 | 73.8 | 82.5 | 64.5 | 852 |
| Tertiary | 89.4 | 94.0 | 86.0 | 370 | 76.8 | 90.8 | 72.7 | 347 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 83.2 | 80.9 | 70.9 | 785 | 77.1 | 71.0 | 59.8 | 601 |
| Second | 83.8 | 83.8 | 74.2 | 862 | 78.4 | 76.7 | 63.3 | 665 |
| Middle | 84.7 | 82.3 | 74.2 | 968 | 76.4 | 76.0 | 63.1 | 856 |
| Fourth | 83.1 | 84.3 | 75.1 | 1,111 | 74.1 | 80.1 | 63.2 | 953 |
| Highest | 87.3 | 90.7 | 81.7 | 1,262 | 73.5 | 85.2 | 66.7 | 1,081 |
| Total 15-49 | 84.6 | 84.9 | 75.8 | 4,987 | 75.5 | 78.7 | 63.6 | 4,156 |
| Total 50+ | 73.8 | 63.5 | 57.0 | 669 | 69.0 | 62.3 | 50.6 | 444 |

### 13.4 Attitudes Towards People Living With AIDS

Widespread stigma and discrimination in a population can adversely affect both people's willingness to be tested for HIV and their adherence to antiretroviral therapy. Reduction of stigma and discrimination in a population is, thus, an important indicator of the success of programmes targeting HIV and AIDS prevention and control.

To assess the level of stigma, survey respondents who had heard of AIDS were asked if they would be willing to care for a relative sick with AIDS in their own household, if they would be willing to buy fresh vegetables from a market vendor who had HIV, if they thought a female teacher who has HIV but is not sick should be allowed to continue teaching, and if they would want to keep a family member's HIV status secret. Tables 13.5 .1 and 13.5.2 show the results for women and men.

| Table 13.5.1 Accepting attitudes towards those living with HIV/AIDS: Women |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes towards people with AIDS, and among women age 50 and over, percentage expressing accepting attitudes towards people with AIDS, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
|  | Percentage of respondents who: |  |  |  |  |  |
| Background characteristic | Are willing to care for a family member with the AIDS virus in own household | Would buy fresh vegetables from shopkeeper who has the AIDS virus | Say that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching | Would not want to keep secret that a family member got infected with the AIDS virus | Percentage expressing acceptance attitudes on all four indicators | Number of women who have heard of AIDS |
| Age |  |  |  |  |  |  |
| 15-24 | 89.5 | 72.4 | 90.2 | 63.8 | 42.5 | 2,316 |
| 15-19 | 88.5 | 68.2 | 88.2 | 63.8 | 40.7 | 1,271 |
| 20-24 | 90.7 | 77.5 | 92.7 | 63.7 | 44.7 | 1,045 |
| 25-29 | 93.3 | 79.2 | 92.3 | 60.0 | 45.3 | 728 |
| 30-39 | 94.6 | 77.4 | 91.7 | 58.8 | 42.9 | 1,114 |
| 40-49 | 94.3 | 70.8 | 88.7 | 59.4 | 40.9 | 817 |
| Marital status |  |  |  |  |  |  |
| Never married | 90.7 | 74.1 | 91.0 | 62.4 | 43.0 | 2,484 |
| Ever had sex | 91.9 | 74.8 | 91.7 | 60.3 | 42.5 | 1,607 |
| Never had sex | 88.5 | 72.8 | 89.7 | 66.2 | 43.8 | 877 |
| Married/living together | 93.0 | 74.8 | 90.6 | 60.9 | 42.6 | 2,053 |
| Divorced/separated/ widowed | 94.5 | 72.9 | 88.4 | 57.5 | 41.9 | 438 |
| Residence |  |  |  |  |  |  |
| Urban | 92.6 | 81.1 | 94.8 | 62.8 | 48.3 | 1,330 |
| Rural | 91.8 | 71.8 | 89.1 | 60.9 | 40.7 | 3,645 |
| Region |  |  |  |  |  |  |
| Hhohho | 92.3 | 77.5 | 91.7 | 62.0 | 45.3 | 1,339 |
| Manzini | 91.8 | 77.1 | 93.9 | 61.9 | 44.7 | 1,642 |
| Shiselweni | 91.5 | 67.4 | 87.4 | 63.2 | 39.8 | 1,031 |
| Lubombo | 92.6 | 72.4 | 87.0 | 57.7 | 39.0 | 964 |
| Education |  |  |  |  |  |  |
| No education | 91.1 | 64.6 | 79.9 | 59.3 | 36.9 | 397 |
| Lower primary | 90.8 | 59.4 | 77.8 | 59.7 | 31.8 | 357 |
| Higher primary | 91.3 | 64.3 | 87.4 | 58.7 | 35.8 | 1,266 |
| Secondary | 92.3 | 77.8 | 92.8 | 65.9 | 46.6 | 1,692 |
| High school | 93.5 | 85.7 | 98.1 | 61.9 | 52.0 | 894 |
| Tertiary | 91.7 | 89.3 | 97.4 | 52.5 | 42.8 | 370 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 91.6 | 63.1 | 80.9 | 56.9 | 34.7 | 777 |
| Second | 91.1 | 69.2 | 89.6 | 61.2 | 37.7 | 860 |
| Middle | 93.0 | 70.9 | 90.3 | 62.6 | 42.5 | 967 |
| Fourth | 91.4 | 79.0 | 92.8 | 64.3 | 47.4 | 1,109 |
| Highest | 92.6 | 83.1 | 95.6 | 60.7 | 47.2 | 1,261 |
| Total 15-49 | 92.0 | 74.3 | 90.6 | 61.4 | 42.7 | 4,975 |
| Total 50+ | 90.0 | 51.3 | 69.6 | 60.2 | 25.8 | 644 |

Table 13.5.2 Accepting attitudes towards those living with HIV/AIDS: Men
Among men age 15-49 who have heard of HIV/AIDS, percentage expressing specific accepting attitudes towards people with HIV/AIDS, and among men age 50 and over, percentage expressing accepting attitudes towards people with AIDS, by background characteristics, Swaziland 2006-07

| Background characteristic | Percentage of respondents who: |  |  |  | Percentage expressing acceptance attitudes on all four indicators | Number of men who have heard of AIDS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Are willing to care for a family member with the AIDS virus in own household | Would buy fresh vegetables from shopkeeper who has the AIDS virus | Say that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching | Would not want to keep secret that a family member got infected with the AIDS virus |  |  |
| Age |  |  |  |  |  |  |
| 15-24 | 89.6 | 77.5 | 87.4 | 65.5 | 46.2 | 2,187 |
| 15-19 | 88.0 | 74.7 | 85.4 | 64.7 | 43.3 | 1,305 |
| 20-24 | 91.9 | 81.6 | 90.5 | 66.7 | 50.5 | 883 |
| 25-29 | 92.7 | 84.8 | 93.8 | 64.4 | 50.5 | 621 |
| 30-39 | 94.6 | 78.8 | 91.9 | 64.7 | 47.7 | 797 |
| 40-49 | 94.3 | 71.0 | 87.9 | 62.0 | 42.0 | 524 |
| Marital status |  |  |  |  |  |  |
| Never married | 90.2 | 78.2 | 88.2 | 65.7 | 46.8 | 2,710 |
| Ever had sex | 91.3 | 79.5 | 89.1 | 64.6 | 47.0 | 1,452 |
| Never had sex | 89.0 | 76.7 | 87.2 | 67.0 | 46.7 | 1,258 |
| Married/living together | 94.8 | 78.9 | 92.6 | 63.2 | 46.7 | 1,215 |
| Divorced/separated/ widowed | 91.6 | 69.7 | 83.8 | 61.4 | 42.3 | 203 |
| Residence |  |  |  |  |  |  |
| Urban | 94.0 | 83.8 | 94.1 | 61.3 | 46.8 | 1,177 |
| Rural | 90.7 | 75.7 | 87.4 | 66.2 | 46.5 | 2,951 |
| Region |  |  |  |  |  |  |
| Hhohho | 92.6 | 82.0 | 91.5 | 66.1 | 50.2 | 1,096 |
| Manzini | 93.0 | 78.9 | 89.9 | 64.1 | 46.7 | 1,341 |
| Shiselweni | 89.9 | 72.0 | 88.2 | 65.3 | 45.2 | 837 |
| Lubombo | 90.0 | 77.5 | 86.5 | 63.5 | 43.1 | 854 |
| Education |  |  |  |  |  |  |
| No education | 88.4 | 54.3 | 73.9 | 62.6 | 29.5 | 310 |
| Lower primary | 87.9 | 57.7 | 75.0 | 63.6 | 32.8 | 458 |
| Higher primary | 91.9 | 71.8 | 85.8 | 66.8 | 44.6 | 974 |
| Secondary | 91.5 | 84.7 | 94.2 | 66.8 | 52.0 | 1,189 |
| High school | 94.2 | 89.7 | 96.0 | 64.9 | 54.7 | 852 |
| Tertiary | 93.2 | 91.8 | 98.8 | 55.2 | 46.8 | 346 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 88.6 | 64.7 | 78.6 | 68.5 | 40.5 | 592 |
| Second | 91.6 | 75.1 | 86.5 | 65.7 | 45.1 | 662 |
| Middle | 90.2 | 75.8 | 88.8 | 62.6 | 43.8 | 845 |
| Fourth | 93.2 | 80.4 | 91.3 | 65.8 | 49.1 | 950 |
| Highest | 93.1 | 86.8 | 95.6 | 62.9 | 50.8 | 1,078 |
| Total 15-49 | 91.6 | 78.0 | 89.3 | 64.8 | 46.6 | 4,128 |
| Total 50+ | 89.7 | 50.4 | 70.8 | 66.9 | 29.4 | 433 |

Willingness to care for a family member with HIV in one's own household is almost universal; over 90 percent of women and men report they are willing to do so. Willingness for a female teacher to continue teaching in spite of being HIV positive is also high. However, when asked whether they would be willing to buy fresh vegetables from a person with HIV, willingness varied substantially by level of education. Only about six in ten women and men with lower levels of education reported that they would buy vegetables from a person with HIV, while nearly nine in ten women and men with higher levels of education would do so. The percentage of the population that would not want to keep the HIV-positive status of a family member secret is generally between 60 and 70 percent across all background characteristics. Looking at all four specified stigma indicators together, the percentage of women and men age 15-49 expressing accepting attitudes is fairly low, 43 percent for women and 47 percent for men. For
women and men age 50 and over, the proportions expressing accepting attitudes for all four indicators are even smaller.

### 13.5 Attitudes towards Negotiating Safer Sex

The high levels of sexual transmission of HIV make negotiating safer sex indispensable, especially in marital unions where women's status is compromised by societal expectations, thereby increasing their vulnerability to HIV transmission.

Table 13.6 shows that 96 percent of women and 97 percent of men believe that, if a wife knows that her husband has an STI, she is justified in refusing to have sex with him or asking him to wear a condom. While requesting the use of a condom is justifiable to nearly all women and men, refusing to have sex is not considered justifiable to one-third of women and one-quarter of men.

| Table 13.6 Attitudes towards negotiating safer sexual relations with husband |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men age 15-49 who believe that, if a husband has a sexually transmitted disease, his wife is justified in refusing to have sexual intercourse with him or asking that they use a condom, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  | Women |  |  |  | Men |  |  |  |
| Background characteristic | Refusing to have sexual intercourse | Asking that they use a condom | Refusing sexual intercourse or asking that they use a condom | Number of women | Refusing to have sexual intercourse | Asking that they use a condom | Refusing sexual intercourse or asking that they use a condom | Number of men |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 65.1 | 93.3 | 95.0 | 2,320 | 71.3 | 95.7 | 97.1 | 2,209 |
| 15-19 | 63.2 | 91.9 | 94.2 | 1,274 | 70.1 | 95.6 | 97.0 | 1,323 |
| 20-24 | 67.4 | 95.1 | 96.0 | 1,046 | 73.1 | 95.9 | 97.4 | 886 |
| 25-29 | 70.7 | 94.0 | 96.5 | 729 | 78.0 | 95.9 | 98.0 | 624 |
| 30-39 | 68.7 | 94.6 | 95.8 | 1,118 | 78.9 | 96.0 | 97.4 | 798 |
| 40-49 | 65.5 | 94.5 | 95.6 | 820 | 76.1 | 95.4 | 97.0 | 525 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 66.9 | 93.9 | 95.4 | 2,487 | 72.5 | 95.7 | 97.4 | 2,734 |
| Ever had sex | 68.2 | 95.2 | 96.4 | 1,607 | 73.6 | 96.3 | 98.0 | 1,458 |
| Never had sex | 64.5 | 91.5 | 93.6 | 880 | 71.2 | 95.0 | 96.7 | 1,276 |
| Married/living together | 66.8 | 93.5 | 95.3 | 2,062 | 78.1 | 96.2 | 97.2 | 1,219 |
| Divorced/separated/ widowed | 66.2 | 95.9 | 97.1 | 438 | 77.4 | 93.8 | 97.1 | 203 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 71.8 | 96.0 | 97.7 | 1,330 | 77.0 | 96.6 | 97.7 | 1,181 |
| Rural | 64.9 | 93.1 | 94.7 | 3,657 | 73.3 | 95.4 | 97.2 | 2,975 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 66.7 | 93.2 | 95.0 | 1,340 | 74.0 | 95.7 | 97.2 | 1,099 |
| Manzini | 67.6 | 93.6 | 95.3 | 1,647 | 76.1 | 96.9 | 98.1 | 1,349 |
| Shiselweni | 65.4 | 94.2 | 95.8 | 1,033 | 72.0 | 95.5 | 97.2 | 843 |
| Lubombo | 67.0 | 95.0 | 96.4 | 966 | 74.4 | 94.3 | 96.2 | 865 |
| Education |  |  |  |  |  |  |  |  |
| No education | 57.9 | 90.4 | 93.7 | 402 | 73.1 | 94.3 | 95.6 | 316 |
| Lower primary | 56.2 | 89.4 | 90.9 | 360 | 66.7 | 93.8 | 95.1 | 470 |
| Higher primary | 63.5 | 92.3 | 93.7 | 1,268 | 71.4 | 96.2 | 97.6 | 980 |
| Secondary | 66.6 | 95.1 | 96.4 | 1,693 | 73.2 | 95.6 | 97.5 | 1,191 |
| High school | 73.4 | 95.4 | 97.4 | 894 | 81.7 | 96.3 | 98.3 | 852 |
| Tertiary | 82.6 | 98.4 | 99.2 | 370 | 80.4 | 97.4 | 98.1 | 347 |
| Total 15-49 | 66.8 | 93.9 | 95.5 | 4,987 | 74.4 | 95.8 | 97.3 | 4,156 |

### 13.6 Attitudes Towards Condom Education for Youth

Condom use is one of the main strategies for combating the spread of HIV. However, educating youth about condoms is sometimes controversial, with some saying it promotes early sexual experimentation. To gauge attitudes towards condom education, SDHS respondents were asked if they thought that children age 12-14 should be taught about using a condom to avoid HIV. The results are shown in Table 13.7. Because the question was asked to ascertain adult opinion, results are tabulated for respondents age 18-49. The data show that a high proportion of adults (74 percent of women and 72 percent of men) agree that children age 12-14 years should be taught about using condoms to avoid HIV. This level of approval is fairly consistent across background characteristics.

### 13.7 Higher-Risk Sex

Information on sexual behaviour is important in designing and monitoring intervention programmes to control the spread of HIV. The 2006-07 SDHS included questions on respondents' sexual partners during their lifetime and over the 12 months preceding the survey. For male respondents, an additional question was asked on whether they paid for sex during the 12 months preceding the interview. Information on the use of condoms at the last sexual intercourse with each type of partner was collected for women and men. These questions are sensitive, and it is recognized that some respondents may have been reluctant to provide information on recent sexual behaviour.

### 13.7.1 Multiple Partners and Condom Use

Tables 13.8 .1 and 13.8.2 show the proportion of women and men age 15-49 and those age 50 and over, who had sexual intercourse with more than one partner in the preceding 12 months, and the proportion who had higher-risk sexual intercourse (sexual intercourse with a non-marital, non-cohabiting partner) by background characteristics.

| Table 13.8.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Women |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among women age 15-49 who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse in the past 12 months; and among those having higher-risk intercourse in the past 12 months, the percentage reporting that a condom was used at last higher-risk intercourse; and the mean number of sexual partners during her lifetime for women who ever had sexual intercourse, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |
|  | Among women who had sexual intercourse in the past 12 months: |  |  | Among women who had higher risk intercourse in the past 12 months: |  | Among women who ever had sexual intercourse |  |
| Background characteristic | Percentage who had 2+ partners in the past 12 months | Percentage who had higher-risk intercourse in the past 12 months ${ }^{1}$ | Number of women | Percentage who reported using a condom at last higher-risk intercourse ${ }^{1}$ | Number of women | Mean number of sexual partners in lifetime | Number of women |
| Age |  |  |  |  |  |  |  |
| 15-24 | 3.8 | 68.5 | 1,285 | 54.2 | 880 | 1.9 | 1,431 |
| 15-19 | 3.8 | 82.2 | 451 | 51.9 | 371 | 1.5 | 521 |
| 20-24 | 3.8 | 61.1 | 834 | 55.8 | 510 | 2.1 | 911 |
| 25-29 | 2.6 | 40.9 | 630 | 62.7 | 257 | 2.5 | 689 |
| 30-39 | 1.4 | 27.8 | 945 | 53.6 | 262 | 2.7 | 1,069 |
| 40-49 | 0.3 | 19.4 | 584 | 42.4 | 113 | 2.7 | 774 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 4.3 | 98.8 | 1,265 | 55.4 | 1,249 | 2.3 | 1,545 |
| Married or living together | 0.9 | 3.9 | 1,980 | 44.5 | 78 | 2.2 | 1,997 |
| Divorced/separated/widowed | 3.7 | 93.7 | 198 | 53.6 | 186 | 3.4 | 421 |
| Residence |  |  |  |  |  |  |  |
| Urban | 4.0 | 48.6 | 957 | 64.2 | 465 | 2.7 | 1,099 |
| Rural | 1.7 | 42.2 | 2,486 | 50.4 | 1,048 | 2.3 | 2,864 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 1.7 | 39.4 | 929 | 56.4 | 366 | 2.6 | 1,052 |
| Manzini | 3.2 | 45.9 | 1,121 | 60.6 | 515 | 2.3 | 1,321 |
| Shiselweni | 1.9 | 50.1 | 682 | 52.6 | 342 | 2.3 | 799 |
| Lubombo | 2.2 | 40.9 | 711 | 44.2 | 291 | 2.2 | 791 |
| Education |  |  |  |  |  |  |  |
| No education | 2.7 | 30.2 | 314 | 37.2 | 95 | 2.5 | 374 |
| Lower primary | 1.3 | 39.8 | 270 | 36.0 | 107 | 2.5 | 317 |
| Higher primary | 2.6 | 42.0 | 865 | 46.7 | 363 | 2.5 | 992 |
| Secondary | 2.1 | 48.4 | 1,086 | 56.7 | 526 | 2.2 | 1,239 |
| High school | 2.8 | 53.3 | 624 | 67.0 | 333 | 2.2 | 715 |
| Tertiary | 2.0 | 31.5 | 284 | 69.3 | 89 | 2.7 | 325 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 1.6 | 40.3 | 553 | 35.7 | 223 | 2.3 | 635 |
| Second | 1.3 | 41.0 | 603 | 48.1 | 247 | 2.2 | 701 |
| Middle | 2.0 | 48.0 | 671 | 51.8 | 322 | 2.4 | 774 |
| Fourth | 4.3 | 48.3 | 734 | 60.3 | 355 | 2.3 | 848 |
| Highest | 2.1 | 41.6 | 882 | 67.5 | 367 | 2.6 | 1,005 |
| Total 15-49 | 2.3 | 43.9 | 3,443 | 54.6 | 1,513 | 2.4 | 3,963 |
| Total $50+$ | 1.2 | 11.8 | 175 | * | 21 | 2.2 | 652 |
| Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. ${ }^{1}$ Sexual intercourse with a non-marital, non-cohabiting partner |  |  |  |  |  |  |  |

The 2006-07 SDHS also assessed condom use among women and men with multiple partners or higher-risk sex in the 12 months preceding the survey. While truly effective protection requires condom use at every sexual encounter, the sexual encounters addressed in Tables 13.8.1 and 13.8.2 are those considered to pose the greatest risk of HIV transmission. Respondents who had more than one sex partner or had sex with a non-marital, non-cohabiting partner (higher-risk sexual intercourse) were also asked whether they used a condom at the last such encounter. Respondents were asked to provide the total number of sexual partners they had in their lifetime. From this, the mean number of lifetime sexual partners was calculated for women and men in Tables 13.8.1 and 13.8.2.

Table 13.8.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men
Among men age 15-49 who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse in the past 12 months, and among those having higher-risk intercourse in the past 12 months, the percentage reporting that a condom was used at last higher-risk intercourse, and the mean number of sexual partners during his lifetime for men who ever had sexual intercourse, by background characteristics, and percentage of men age 50 and over reporting higher-risk sexual intercourse and condom use during last higher-risk intercourse and mean number of lifetime sexual partners among older men who ever had sexual intercourse, Swaziland 2006-07

| Background characteristic | Among men who had sexual intercourse in the past 12 months: |  |  | Among men who had $2+$ partners in the past 12 months: |  | Among men who had higher-risk intercourse in the past 12 months: |  | Among men who ever had sexual intercourse |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had $2+$ partners in the past 12 months | Percentage who had higher-risk intercourse in the past 12 months ${ }^{1}$ | Number of men | Percentage who reported using a condom during last sexual intercourse | Number of men | Percentage who reported using a condom at last higher-risk intercourse ${ }^{1}$ | Number of men | Mean number of sexual partners in lifetime | Number of men |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 28.5 | 91.9 | 755 | 66.7 | 215 | 70.4 | 694 | 4.0 | 948 |
| 15-19 | 25.7 | 97.5 | 196 | (74.8) | 50 | 68.8 | 191 | 2.7 | 281 |
| 20-24 | 29.5 | 90.0 | 559 | 64.3 | 165 | 71.1 | 503 | 4.5 | 667 |
| 25-29 | 26.8 | 63.9 | 523 | 61.2 | 140 | 71.0 | 334 | 6.3 | 554 |
| 30-39 | 19.3 | 40.7 | 723 | 50.3 | 139 | 65.0 | 294 | 8.0 | 720 |
| 40-49 | 15.1 | 25.0 | 477 | 26.2 | 72 | 53.1 | 120 | 10.0 | 460 |
| Marital status |  |  |  |  |  |  |  |  |  |
| Never married | 29.4 | 97.8 | 1,120 | 70.2 | 330 | 69.5 | 1,096 | 5.3 | 1,388 |
| Married or living together | 17.9 | 17.7 | 1,203 | 33.7 | 215 | 70.2 | 212 | 7.8 | 1,110 |
| Divorced/separated/ widowed | 14.8 | 86.6 | 155 | (64.9) | 23 | 52.3 | 134 | 9.1 | 184 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 21.4 | 53.1 | 873 | 63.9 | 186 | 74.2 | 463 | 6.8 | 887 |
| Rural | 23.7 | 61.0 | 1,605 | 52.4 | 381 | 65.1 | 979 | 6.5 | 1,796 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 18.9 | 51.3 | 699 | 54.6 | 132 | 73.2 | 359 | 6.5 | 722 |
| Manzini | 25.4 | 63.1 | 807 | 63.0 | 205 | 69.0 | 509 | 6.3 | 904 |
| Shiselweni | 23.9 | 64.8 | 436 | 58.1 | 104 | 64.3 | 283 | 6.0 | 500 |
| Lubombo | 23.4 | 54.4 | 536 | 45.1 | 126 | 63.6 | 292 | 7.8 | 557 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 17.1 | 40.2 | 233 | (32.3) | 40 | 54.9 | 93 | 8.0 | 256 |
| Lower primary | 17.6 | 56.7 | 264 | 32.7 | 46 | 52.5 | 150 | 6.9 | 280 |
| Higher primary | 22.3 | 60.4 | 483 | 49.8 | 108 | 57.4 | 292 | 6.2 | 536 |
| Secondary | 25.7 | 66.3 | 631 | 62.8 | 162 | 70.7 | 418 | 6.8 | 694 |
| High school | 27.1 | 65.2 | 572 | 66.1 | 155 | 77.7 | 373 | 5.4 | 627 |
| Tertiary | 18.9 | 39.3 | 295 | 57.9 | 56 | 85.0 | 116 | 7.9 | 290 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 22.8 | 56.1 | 326 | 42.8 | 74 | 55.9 | 183 | 7.1 | 369 |
| Second | 24.6 | 60.0 | 338 | 49.8 | 83 | 57.6 | 203 | 7.3 | 383 |
| Middle | 23.0 | 65.7 | 469 | 49.9 | 108 | 65.3 | 309 | 5.9 | 525 |
| Fourth | 22.3 | 61.4 | 594 | 65.0 | 133 | 71.1 | 364 | 5.4 | 642 |
| Highest | 22.5 | 51.1 | 752 | 62.2 | 169 | 78.6 | 384 | 7.5 | 763 |
| Total 15-49 | 22.9 | 58.2 | 2,478 | 56.2 | 567 | 68.0 | 1,442 | 6.6 | 2,683 |
| Total $50+$ | 10.1 | 9.9 | 324 | (19.7) | 33 | (35.3) | 32 | 9.9 | 375 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Sexual intercourse with a non-marital, non-cohabiting partner
Two percent of women and 23 percent of men age 15-49 who had sex in the 12 months preceding the survey had sex with two or more partners. Figures are half that for those age 50 and over ( 1 percent of women and 10 percent of men). Just over half of women and men age 15-49 with two or more partners reported using a condom the last time they had sex ( 55 percent of women and 68 percent of men).

Sexual intercourse with a non-marital, non-cohabiting partner is not uncommon. Forty-four percent of women and 58 percent of men age 15-49 who had sex in the 12 months preceding the survey reported having had sex with a non-marital, non-cohabiting partner. This higher-risk sexual behaviour is less common among adults age 50 and over ( 12 percent of women and 10 percent of men).

While condom use is common with higher-risk partners, it is far from universal. Half of women age 15-49 (55 percent) and two-thirds of men age 15-49 (68 percent) who had sex with a non-marital, non-cohabiting partner in the 12 months preceding the survey used a condom the last time they had sex with such a partner.

Looking at marital status, by definition, all sexual activity among women and men who have never married is higher-risk sex. Among married women and men age 15-49 who had sex in the previous 12 months, 4 percent of women and 18 percent of men engaged in higher-risk sex. Never-married women are somewhat more likely than married women to use condoms during higher-risk sex ( 55 and 45 percent, respectively). However, never-married men and married men are equally likely to use a condom during higher-risk sex ( 70 percent). Divorced, separated, and widowed men are the least likely to use a condom during higher-risk sex (52 percent).

There is a general increase in both higher-risk sex and condom use during higher-risk sex with increasing level of education and increasing household wealth quintile. It is worth noting, however, that engagement in higher-risk sex drops among women and men with tertiary education, to 32 percent among women and 39 percent among men.

The mean number of lifetime sexual partners among people age $15-49$ is 2.4 for women and 6.6 for men. Among men age 50 and over, the number increases to 10 .

Very few men in Swaziland reported paying for sex in the 12 months preceding the survey (data not shown).

### 13.7.2 Condom Use and Knowledge of Source

Condom use among the sexually active population plays an important role in preventing the transmission of HIV and other sexually transmitted infections, as well as unwanted pregnancies. In the 2006-07 SDHS, men age 15-49 who used condoms during their most recent sexual intercourse (within the 12 months prior to interview) were asked to identify the specific brand of condom used, the number of condoms they obtained the last time they obtained condoms, the source where the condoms were obtained, and the usual manner in which the condoms were disposed of.

Results indicate that 80 percent of men who use condoms use either Trust brand condoms (43 percent) or govern-ment-issued condoms ( 37 percent) (Table 13.9). In terms of the number of condoms obtained, 53 percent obtained three to six condoms the last time they obtained condoms, and 36 percent obtained seven or more. Shops are the most common source for condoms ( 44 percent of men); health facilities are the second most common source ( 16 percent of men). Twothirds of men reported disposing of used condoms in pit

| Table 13.9 Condom use characteristics among men |  |
| :---: | :---: |
| Among men 15-49 who used a condom at last sexual intercourse in the 12 months before the survey, percentage using specific condom brands and percent distribution by the number of condoms obtained the last time, the source where the condoms were obtained, and the usual mode of disposal for used condoms, Swaziland 2006-07 |  |
| Condom use characteristic | Percentage of men |
| Brand |  |
| Government condoms | 36.8 |
| Trust | 42.9 |
| Other brands | 9.0 |
| Don't know/missing | 11.4 |
| Number of condoms obtained the last time |  |
| 1 | 1.1 |
| 2 | 2.8 |
| 3 | 35.1 |
| 4 | 4.1 |
| 5 | 4.6 |
| 6 | 9.0 |
| $7+$ | 36.3 |
| Don't know/missing | 7.0 |
| Last source where condom obtained |  |
| Hospital/ health centre/PHU clinic | 15.5 |
| RHM/CBD/mobile clinic | 7.9 |
| Hospital/clinic/private doctor | 2.8 |
| CBD/mobile clinic | 0.6 |
| Pharmacy | 3.1 |
| Other | 1.7 |
| Mission | 2.0 |
| NGO | 2.4 |
| Shop | 43.7 |
| Other | 17.7 |
| Don't know/missing | 2.6 |
| Usual mode of disposal |  |
| Pit latrine | 66.5 |
| Flush in toilet | 12.6 |
| Bury | 5.9 |
| Burned | 5.9 |
| Thrown away | 4.6 |
| Other | 1.1 |
| Missing | 3.4 |
| Total | 100.0 |
| Number of men | 1,197 | latrines. Flush toilets were the next most commonly used mode of disposal (13 percent of men).

Consistent use of condoms requires, among other things, knowing where to get them. Men and women age 15-49 were asked whether they know of a place they can get male condoms and whether they know of a place they can get female condoms. Table 13.10 shows the percent distribution of women and men by knowledge of condoms and a source for condoms.

There is generally a high level awareness of male condoms and where to obtain them among both women and men. Only 11 percent of women and 10 percent of men knowing about condoms but do not know where to get them. However, knowledge of the female condom is low. About half of women and men age 15-49 have heard of the female condom, but do not know where to get them ( 45 percent of women and 56 percent of men).

| Percent distribution of women and men age 15-49 by knowledge of male and female condoms and a source for these condoms, Swaziland 2006-07 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | men | M |  |
| Knowledge of condom and condom source | Male condom | Female condom | Male condom | Female condom |
| Knows of condom and a condom source | 87.8 | 46.1 | 88.9 | 28.1 |
| Knows of condom, does not know condom source | 11.0 | 45.2 | 10.3 | 56.0 |
| Does not know about condom | 1.2 | 8.7 | 0.8 | 15.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 4,987 | 4,987 | 4,156 | 4,156 |

### 13.8 Coverage of HIV Testing and Counselling

Knowledge of HIV status enables HIV-negative individuals to make specific decisions that can reduce the risk of contracting HIV. For those who are HIV positive, knowledge of their HIV status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future.

To assess the awareness and coverage of HIV testing services, SDHS respondents were asked whether they had ever been tested for HIV. Respondents who had had an HIV test were asked how long ago their most recent test occurred, whether they had received the results of their most recent test, and where they had been tested. Respondents who had never been tested were asked if they know a place they can go to get tested. Tables 13.11.1 and 13.11.2 present the results of these questions.

Respondents were asked if they know where to get an HIV test. The results indicate a generally high level of knowledge of where an HIV test can be obtained. Nine in ten women ( 92 percent) and eight in ten men ( 78 percent) age 15-49 know where to go for an HIV test. Older adults are somewhat less likely to know a place to get an HIV test (seven in ten women and men).

| Table 13.11.1 Coverage of prior HIV testing: Women |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women age 15-49 by testing status and whether they received the results of the last test, the percentage of women ever tested, and the percentage of women age 15-49 who received their test results the last time they were tested for HIV in the past 12 months, and the percentage of women age 50 and over who know source for HIV testing and who have been tested and received results, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  | Percentage who know where to get an HIV test | Percent distribution of women by testing status and by whether they received the results of the last test |  |  |  |  | Percentage who received results from last HIV test taken in the past 12 months |  |
| Background characteristic |  | Ever tested and received results | Ever tested did not receive results | Never tested ${ }^{1}$ | Total | Percentage ever tested |  | Number of women |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 87.1 | 27.7 | 5.1 | 67.3 | 100.0 | 32.7 | 18.1 | 2,320 |
| 15-19 | 80.6 | 15.8 | 3.1 | 81.1 | 100.0 | 18.9 | 10.0 | 1,274 |
| 20-24 | 95.0 | 42.1 | 7.4 | 50.5 | 100.0 | 49.5 | 27.9 | 1,046 |
| 25-29 | 96.6 | 47.0 | 6.1 | 46.9 | 100.0 | 53.1 | 29.7 | 729 |
| 30-39 | 97.0 | 45.9 | 5.5 | 48.6 | 100.0 | 51.4 | 25.9 | 1,118 |
| 40-49 | 93.8 | 35.3 | 2.4 | 62.2 | 100.0 | 37.8 | 20.5 | 820 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 87.9 | 27.8 | 4.4 | 67.8 | 100.0 | 32.2 | 17.0 | 2,487 |
| Ever had sex | 94.0 | 39.9 | 6.2 | 53.9 | 100.0 | 46.1 | 24.7 | 1,607 |
| Never had sex | 76.6 | 5.8 | 1.0 | 93.2 | 100.0 | 6.8 | 2.9 | 880 |
| Married/living together | 95.7 | 43.1 | 5.8 | 51.1 | 100.0 | 48.9 | 26.7 | 2,062 |
| Divorced/separated/ widowed | 95.6 | 47.0 | 3.6 | 49.4 | 100.0 | 50.6 | 27.4 | 438 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 95.5 | 42.5 | 5.2 | 52.3 | 100.0 | 47.7 | 24.1 | 1,330 |
| Rural | 90.5 | 33.4 | 4.8 | 61.8 | 100.0 | 38.2 | 21.1 | 3,657 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 93.2 | 34.6 | 5.1 | 60.4 | 100.0 | 39.6 | 19.7 | 1,340 |
| Manzini | 91.8 | 39.4 | 4.5 | 56.1 | 100.0 | 43.9 | 24.2 | 1,647 |
| Shiselweni | 88.6 | 31.6 | 5.1 | 63.3 | 100.0 | 36.7 | 21.0 | 1,033 |
| Lubombo | 93.3 | 36.1 | 5.1 | 58.8 | 100.0 | 41.2 | 22.2 | 966 |
| Education |  |  |  |  |  |  |  |  |
| No education | 89.4 | 29.4 | 6.3 | 64.3 | 100.0 | 35.7 | 19.0 | 402 |
| Lower primary | 86.8 | 32.5 | 5.2 | 62.3 | 100.0 | 37.7 | 16.2 | 360 |
| Higher primary | 88.1 | 32.1 | 4.4 | 63.5 | 100.0 | 36.5 | 21.5 | 1,268 |
| Secondary | 92.0 | 34.5 | 4.2 | 61.3 | 100.0 | 38.7 | 21.0 | 1,693 |
| High school | 97.0 | 40.1 | 6.4 | 53.5 | 100.0 | 46.5 | 26.1 | 894 |
| Tertiary | 98.7 | 54.7 | 4.2 | 41.1 | 100.0 | 58.9 | 26.4 | 370 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 88.6 | 30.8 | 5.5 | 63.7 | 100.0 | 36.3 | 20.1 | 785 |
| Second | 90.5 | 33.6 | 5.1 | 61.3 | 100.0 | 38.7 | 20.9 | 862 |
| Middle | 89.2 | 33.5 | 5.5 | 61.0 | 100.0 | 39.0 | 22.1 | 968 |
| Fourth | 93.3 | 36.6 | 4.9 | 58.5 | 100.0 | 41.5 | 22.4 | 1,111 |
| Highest | 95.4 | 41.7 | 3.8 | 54.5 | 100.0 | 45.5 | 23.3 | 1,262 |
| Total 15-49 | 91.8 | 35.8 | 4.9 | 59.3 | 100.0 | 40.7 | 21.9 | 4,987 |
| Total 50+ | 71.1 | 15.6 | 2.4 | 82.0 | 100.0 | 18.0 | 10.2 | 669 |
| ${ }^{1}$ Includes "don't know/missing" |  |  |  |  |  |  |  |  |

Among the population age 15-49 in Swaziland, 36 percent of women and 17 percent of men reported having ever been tested and receiving test results for HIV at some time. One in five women (22 percent) and one in ten men ( 9 percent) were tested and received the results in the 12 months preceding the survey. These figures indicate that about half of the population ever tested for HIV were tested in the 12 months before the survey.

| Table 13.11.2 Coverage of prior HIV testing: Men |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who received their test results the last time they were tested for HIV in the past 12 months, and the percentage of men age 50 and over who know source for HIV testing and who have been tested and received results, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  | Percentage who know where to get an HIV test | Percent distribution of men by testing status and by whether they received the results of the last test |  |  |  |  | Percentage who received results from | Number of men |
| Background characteristic |  | Ever tested and received results | Ever tested did not receive results | Never tested | Total | Percentage ever tested | last HIV test taken in the past 12 months |  |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 69.7 | 7.1 | 0.9 | 92.0 | 100.0 | 8.0 | 3.9 | 2,209 |
| 15-19 | 61.6 | 3.0 | 0.5 | 96.5 | 100.0 | 3.5 | 1.8 | 1,323 |
| 20-24 | 81.7 | 13.2 | 1.5 | 85.3 | 100.0 | 14.7 | 6.9 | 886 |
| 25-29 | 88.0 | 25.8 | 2.5 | 71.6 | 100.0 | 28.4 | 13.1 | 624 |
| 30-39 | 88.2 | 29.7 | 2.3 | 68.0 | 100.0 | 32.0 | 15.7 | 798 |
| 40-49 | 86.3 | 29.5 | 1.6 | 68.9 | 100.0 | 31.1 | 15.1 | 525 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 72.7 | 10.7 | 1.1 | 88.1 | 100.0 | 11.9 | 5.4 | 2,734 |
| Ever had sex | 81.9 | 16.8 | 1.6 | 81.6 | 100.0 | 18.4 | 8.4 | 1,458 |
| Never had sex | 62.2 | 3.8 | 0.7 | 95.6 | 100.0 | 4.4 | 2.0 | 1,276 |
| Married/living together | 89.0 | 29.8 | 1.9 | 68.3 | 100.0 | 31.7 | 15.9 | 1,219 |
| Divorced/separated/ widowed | 85.5 | 25.9 | 4.2 | 69.9 | 100.0 | 30.1 | 14.5 | 203 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 89.9 | 23.9 | 1.7 | 74.3 | 100.0 | 25.7 | 12.8 | 1,181 |
| Rural | 73.4 | 14.3 | 1.4 | 84.2 | 100.0 | 15.8 | 7.4 | 2,975 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 82.0 | 17.8 | 1.4 | 80.9 | 100.0 | 19.1 | 8.6 | 1,099 |
| Manzini | 77.7 | 18.6 | 1.5 | 79.9 | 100.0 | 20.1 | 9.2 | 1,349 |
| Shiselweni | 69.0 | 11.5 | 1.4 | 87.1 | 100.0 | 12.9 | 6.7 | 843 |
| Lubombo | 82.5 | 19.3 | 1.9 | 78.9 | 100.0 | 21.1 | 11.1 | 865 |
| Education |  |  |  |  |  |  |  |  |
| No education | 68.4 | 19.1 | 1.3 | 79.6 | 100.0 | 20.4 | 11.4 | 316 |
| Lower primary | 63.6 | 10.4 | 1.6 | 87.9 | 100.0 | 12.1 | 5.7 | 470 |
| Higher primary | 67.0 | 10.3 | 1.4 | 88.2 | 100.0 | 11.8 | 6.5 | 980 |
| Secondary | 80.1 | 12.6 | 0.9 | 86.5 | 100.0 | 13.5 | 6.3 | 1,191 |
| High school | 91.5 | 23.0 | 2.0 | 74.9 | 100.0 | 25.1 | 11.1 | 852 |
| Tertiary | 98.0 | 44.0 | 2.5 | 53.5 | 100.0 | 46.5 | 21.7 | 347 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 66.6 | 8.5 | 2.3 | 89.2 | 100.0 | 10.8 | 5.0 | 601 |
| Second | 69.9 | 13.5 | 1.4 | 85.1 | 100.0 | 14.9 | 7.4 | 665 |
| Middle | 73.1 | 13.4 | 1.3 | 85.3 | 100.0 | 14.7 | 7.2 | 856 |
| Fourth | 80.2 | 17.6 | 1.2 | 81.2 | 100.0 | 18.8 | 9.7 | 953 |
| Highest | 91.6 | 26.4 | 1.6 | 72.0 | 100.0 | 28.0 | 12.8 | 1,081 |
| Total 15-49 | 78.1 | 17.1 | 1.5 | 81.4 | 100.0 | 18.6 | 8.9 | 4,156 |
| Total 50+ | 67.7 | 17.2 | 3.2 | 79.6 | 100.0 | 20.4 | 9.8 | 444 |
| ${ }^{1}$ Includes "don't know/missing" |  |  |  |  |  |  |  |  |

Overall, six in ten women age 15-49 and eight in ten men age 15-49 have never been tested for HIV. About eight in ten women and men age 50 and over have never been tested for HIV. Among both women and men, higher testing rates are observed among urban residents. Substantially higher testing rates are seen among those with higher education and those in the highest wealth quintile.

Adults age 15 and older who reported receiving the results of their last HIV test were asked how long it took to receive the results. Table 13.12 shows that the majority of the population tested received the HIV test results on the same day as the test: 75 percent for women and 59 percent for men age 15-49, and 70 percent for women and 66 percent for men age 50 and over. A sizable proportion received their results within one week of the test: 14-17 percent for women and 22-25 percent for men.

| Table 13.12 Time to get HIV test result |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men age 15-49 and age $50+$ who received the results of the last HIV test by the time it took to get the results, Swaziland 2006-07 |  |  |  |  |
| Time taken to get HIV test results | Women |  | Men |  |
|  | 15-49 | 50+ | 15-49 | 50+ |
| Same day | 74.7 | 69.5 | 58.5 | 65.5 |
| Within a week | 14.3 | 17.2 | 22.1 | 25.2 |
| Within a month | 8.1 | 11.2 | 13.3 | 4.8 |
| More than one month | 2.9 | 2.1 | 6.1 | 4.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,217 | 104 | 709 | 76 |

Screening for HIV in pregnant women is a tool for reducing the transmission of HIV from mother to child. Table 13.13 shows that among women who gave birth in the two years preceding the survey, 65 percent received HIV counselling during antenatal care for their most recent birth. Half of the women who gave birth during the two-year period (54 percent) voluntarily accepted an offer of an HIV test and received the test results. The proportion of women who were tested and received the test results increases with level of education and household wealth quintile. There is a substantial gap in receipt of HIV screening services by urban-rural residence. Among pregnant women, 39 percent of those in rural areas were counselled, offered an HIV test, accepted the test, and received the test results, compared with 53 percent in urban areas.

Table 13.13 Pregnant women counselled and tested for HIV
Among all women age 15-49 who gave birth in the two years preceding the survey, the percentage who received HIV counselling during antenatal care for their most recent birth, and percentage who accepted an offer of HIV testing by whether they received their test results, according to background characteristics, Swaziland 2006-07

| Background characteristic | Percentage who received HIV counselling during antenatal care ${ }^{1}$ | Percentage who were offered and accepted an HIV test during antenatal care and who ${ }^{2}$ : |  | Percentage who were counselled, were offered and accepted an HIV test, and who received results ${ }^{2}$ | Number of women who gave birth in the past two years ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Received results | Did not receive results |  |  |
| Age |  |  |  |  |  |
| 15-24 | 59.9 | 52.5 | 6.7 | 39.8 | 581 |
| 15-19 | 53.7 | 51.9 | 6.1 | 36.8 | 202 |
| 20-24 | 63.2 | 52.8 | 7.1 | 41.4 | 379 |
| 25-29 | 70.8 | 54.6 | 5.7 | 46.7 | 256 |
| 30-39 | 67.9 | 55.0 | 5.8 | 42.2 | 269 |
| 40-49 | (69.5) | (57.7) | (2.3) | (50.7) | 41 |
| Residence |  |  |  |  |  |
| Urban | 78.2 | 62.8 | 5.8 | 53.1 | 246 |
| Rural | 60.8 | 51.3 | 6.2 | 39.4 | 901 |
| Region |  |  |  |  |  |
| Hhohho | 62.5 | 41.5 | 4.8 | 32.0 | 311 |
| Manzini | 75.2 | 69.8 | 4.4 | 57.5 | 348 |
| Shiselweni | 66.0 | 54.0 | 8.3 | 43.6 | 247 |
| Lubombo | 50.4 | 46.0 | 7.9 | 32.4 | 241 |
| Education |  |  |  |  |  |
| No education | 50.2 | 43.5 | 7.4 | 25.1 | 97 |
| Lower primary | 51.8 | 35.3 | 5.6 | 28.4 | 91 |
| Higher primary | 59.1 | 50.3 | 6.6 | 38.8 | 315 |
| Secondary | 67.7 | 58.9 | 4.5 | 46.5 | 393 |
| High school | 76.3 | 59.5 | 7.6 | 51.2 | 200 |
| Tertiary | 77.8 | 65.1 | 7.7 | 54.4 | 51 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 52.7 | 42.9 | 7.3 | 30.3 | 251 |
| Second | 61.3 | 51.9 | 5.4 | 41.1 | 240 |
| Middle | 67.6 | 51.2 | 6.9 | 41.1 | 245 |
| Fourth | 70.3 | 62.8 | 6.4 | 48.6 | 218 |
| Highest | 73.5 | 63.2 | 4.2 | 53.7 | 193 |
| Total 15-49 | 64.6 | 53.7 | 6.1 | 42.3 | 1,147 |

Note: Figures in parentheses are based on 25-49 unweighted cases..
${ }^{1}$ In this context, "counselled" means that someone talked with the respondent about all three of the following topics: 1) babies getting the AIDS virus from their mother, 2) preventing the virus, and 3) getting tested for the virus.
${ }^{2}$ Only women who were offered the test are included here; women who were either required to take the test or asked for the test are excluded from the numerator of this measure..
${ }^{3}$ Denominator for percentages includes women who did not receive antenatal care for their last birth in the past two years.

### 13.9 Self-Reporting of Sexually Transmitted Infections

In the 2006-07 SDHS, respondents who had ever had sex were asked if they had contracted a disease through sexual contact in the past 12 months, or if they had exhibited either of two symptoms associated with STIs (a bad-smelling, abnormal discharge from the vagina or penis, or a genital sore or ulcer). Table 13.14 shows the self-reported prevalence of STIs and STI symptoms for women and men.

Table 13.14 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms
Among women and men age 15-49 who ever had sexual intercourse, the percentage who reported having an STI and/or symptoms of an STI in the past 12 months, and the percentage of women and men age 50 and over ever sexually active reporting an STI and/or symptoms of an STI, by background characteristics, Swaziland 2006-07

| Background characteristic | Women |  |  |  |  | Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | STI | Bad smelling/ abnormal genital discharge | Genital sore/ulcer | STI/genital discharge/sore or ulcer | Number of women who ever had sexual intercourse | STI | Bad smelling/ abnormal genital discharge | Genital sore/ulcer | STI/genital discharge/sore or ulcer | Number of men who ever had sexual intercourse |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 5.7 | 8.0 | 7.5 | 13.0 | 1,468 | 7.4 | 5.8 | 6.1 | 10.9 | 983 |
| 15-19 | 3.2 | 7.2 | 5.7 | 10.8 | 527 | 3.5 | 6.0 | 4.8 | 8.9 | 286 |
| 20-24 | 7.1 | 8.5 | 8.5 | 14.2 | 941 | 9.0 | 5.8 | 6.7 | 11.7 | 697 |
| 25-29 | 9.3 | 9.2 | 8.4 | 14.8 | 711 | 12.5 | 8.1 | 9.4 | 16.3 | 589 |
| 30-39 | 6.2 | 5.4 | 7.2 | 11.6 | 1,111 | 7.8 | 5.5 | 7.3 | 10.5 | 784 |
| 40-49 | 2.9 | 4.5 | 4.6 | 6.4 | 817 | 4.0 | 3.2 | 4.7 | 7.1 | 524 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 5.1 | 6.5 | 5.8 | 10.9 | 1,607 | 7.9 | 5.6 | 6.2 | 11.2 | 1,458 |
| Married or living together | 7.1 | 7.8 | 8.3 | 13.0 | 2,062 | 7.0 | 5.4 | 6.5 | 10.0 | 1,219 |
| Divorced/separated/ widowed | 3.5 | 3.6 | 5.2 | 7.5 | 438 | 14.0 | 8.8 | 14.0 | 18.2 | 203 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 5.5 | 5.8 | 5.2 | 9.7 | 1,145 | 7.9 | 5.3 | 5.1 | 9.4 | 968 |
| Rural | 6.1 | 7.3 | 7.7 | 12.4 | 2,962 | 7.9 | 5.9 | 7.7 | 12.1 | 1,912 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 5.6 | 6.4 | 6.0 | 10.0 | 1,113 | 7.2 | 4.8 | 6.8 | 10.3 | 800 |
| Manzini | 6.3 | 6.7 | 5.9 | 10.8 | 1,359 | 8.9 | 6.2 | 6.1 | 10.9 | 948 |
| Shiselweni | 5.4 | 5.9 | 7.9 | 12.0 | 813 | 7.8 | 6.2 | 7.0 | 11.9 | 525 |
| Lubombo | 6.1 | 8.6 | 9.2 | 14.7 | 822 | 7.5 | 5.8 | 8.1 | 12.2 | 607 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 6.3 | 8.9 | 10.1 | 14.8 | 393 | 5.6 | 4.8 | 6.3 | 8.4 | 275 |
| Lower primary | 6.6 | 9.2 | 9.9 | 15.1 | 327 | 10.6 | 8.1 | 11.3 | 16.1 | 300 |
| Higher primary | 6.9 | 8.3 | 9.3 | 14.4 | 1,025 | 9.0 | 8.8 | 6.9 | 13.6 | 562 |
| Secondary | 6.0 | 6.6 | 5.8 | 11.0 | 1,282 | 8.0 | 5.1 | 7.8 | 12.3 | 737 |
| High school | 5.9 | 5.4 | 5.6 | 9.7 | 741 | 8.6 | 4.9 | 6.1 | 10.1 | 685 |
| Tertiary | 1.4 | 1.8 | 1.5 | 2.8 | 339 | 3.8 | 2.1 | 2.5 | 4.5 | 320 |
| Total 15-49 | 5.9 | 6.9 | 7.0 | 11.6 | 4,107 | 7.9 | 5.7 | 6.9 | 11.2 | 2,880 |
| Total 50+ | 0.5 | 0.9 | 1.0 | 1.6 | 667 | 1.4 | 1.3 | 1.3 | 2.6 | 444 |

Results show that about 11 percent of both women and men who have ever been sexually active had an STI and/or an STI symptom in the 12 months prior to the survey. Prevalence of an STI or an STI symptom peaks among women (15 percent) and men (16 percent) age 25-29; prevalence is also high among divorced/separated/widowed men (18 percent).

SDHS respondents who reported having an STI or symptoms of an STI in the past 12 months were asked if they sought any advice or treatment for their symptoms and where such advice or treatment was sought. The results in Figure 13.1 indicate that more than 70 percent of both women and men age 1549 sought advice or treatment from a health facility or health professional. About half of the women and men who did not seek advice or treatment reported that treatment was not necessary (Table 13.15).

Figure 13.1 Women and Men Seeking Advice or Treatment for STIs


| Table 13.15 Reason for not seeking |  |  |
| :--- | ---: | ---: |
| $\underline{\text { treatment for STIs }}$ |  |  |
| Percent distribution of women and men age |  |  |
| 15-49 who did not seek treatment for an STI |  |  |
| experienced in the past 12 months by the |  |  |
| main reason for not seeking | treatment, |  |
| Swaziland 2006-07 |  |  |
| Reason for not |  |  |
| seeking treatment |  |  |
| Not necessary | 52.2 | 47.6 |
| Expensive | 21.5 | 10.5 |
| Religious prohibition | 1.5 | 6.2 |
| Other | 24.8 | 20.4 |
| Missing | 0.0 | 15.4 |
| Total | 100.0 | 100.0 |
| Number | 101 | 60 |

Eight in ten women and seven in ten men informed their partners about their STI or STI symptoms (Table 13.16). While the majority of women and men who had an STI or STI symptom took some action to avoid infecting their partner, many did not. Fifty-seven percent of women and 69 percent of men used medicine and 39 percent of women and 53 percent of men stopped having sex. Only about one-third of respondents resorted to using condoms to avoid infecting their partners (33 percent of women and 38 percent of men).

Table 13.16 Actions taken when had STI/STI symptoms
Percentage of women and men 15-49 reporting an STI or symptoms of an STI in the past 12 months who took specific actions, Swaziland 2006-07

| Action taken | Women | Men |
| :--- | :---: | ---: |
| Informed all partners about problem | 79.6 | 70.7 |
| Informed some but not all partners | 0.2 | 0.5 |
| Took action to avoid infecting partner | 68.4 | 81.3 |
| Used medicine | 56.7 | 69.1 |
| Stopped having sex | 39.0 | 53.3 |
| Used condom | 32.7 | 37.6 |
| Number | 477 | 323 |

### 13.10 Prevalence of Medical Injections

Non-sterile injections can pose a risk of infection with HIV and other diseases. To measure the potential risk of HIV transmission through medical injections, respondents in the 2006-07 SDHS were asked if they had received an injection in the past 12 months and, if so, the number of injections. The results indicate that more women ( 37 percent) than men ( 23 percent) reported receiving a medical injection in the past 12 months. The average number of injections received per person during this period (including people who received no injections at all) is 1.1 injections per woman age 15-49 and 0.7 injections per man age 15-49. There were no substantial differentials by background characteristics.

| Table 13.17 Prevalence of medical injections |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women and men age 15-49 who received at least one medical injection in the past 12 months, the average number of medical injections per person in the past 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |
|  | Women |  |  |  |  | Men |  |  |  |  |
| Background characteristic | Percentage who received medical injection in past 12 months | Average number of medical injections per person in past 12 months | Number of women | For last injection, syringe and needle were taken from new, unopened package | Number of women who received medical injection in past 12 months | Percentage who received medical injection in past 12 months | Average number of medical injections per person in past 12 months | Number of men | For last injection, syringe and needle were taken from new, unopened package | Number of men who received medical injection in past 12 months |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 33.4 | 0.8 | 2,320 | 96.3 | 774 | 18.2 | 0.3 | 2,209 | 93.9 | 401 |
| 15-19 | 27.2 | 0.6 | 1,274 | 95.6 | 347 | 16.5 | 0.3 | 1,323 | 95.0 | 219 |
| 20-24 | 40.8 | 1.1 | 1,046 | 96.7 | 427 | 20.6 | 0.4 | 886 | 92.7 | 183 |
| 25-29 | 46.5 | 1.4 | 729 | 97.0 | 339 | 29.5 | 0.7 | 624 | 95.5 | 184 |
| 30-39 | 41.9 | 1.4 | 1,118 | 97.6 | 468 | 27.4 | 1.6 | 798 | 92.1 | 219 |
| 40-49 | 33.1 | 1.3 | 820 | 93.9 | 272 | 26.1 | 1.2 | 525 | 90.4 | 137 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 38.1 | 1.3 | 1,330 | 95.5 | 507 | 24.6 | 1.0 | 1,181 | 95.1 | 290 |
| Rural | 36.8 | 1.1 | 3,657 | 96.7 | 1,346 | 21.9 | 0.6 | 2,975 | 92.5 | 651 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 37.2 | 1.0 | 1,340 | 96.5 | 499 | 23.8 | 0.8 | 1,099 | 94.9 | 261 |
| Manzini | 34.1 | 1.1 | 1,647 | 96.7 | 562 | 21.3 | 0.6 | 1,349 | 96.6 | 287 |
| Shiselweni | 40.1 | 1.1 | 1,033 | 95.8 | 414 | 22.3 | 0.7 | 843 | 88.1 | 188 |
| Lubombo | 39.1 | 1.3 | 966 | 96.3 | 378 | 23.7 | 0.7 | 865 | 91.4 | 205 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 31.6 | 1.0 | 402 | 93.8 | 127 | 22.5 | 1.3 | 316 | 88.2 | 71 |
| Lower primary | 33.0 | 0.9 | 360 | 97.8 | 119 | 18.9 | 0.5 | 470 | 94.7 | 89 |
| Higher primary | 37.4 | 1.2 | 1,268 | 97.2 | 475 | 21.5 | 0.5 | 980 | 93.7 | 211 |
| Secondary | 37.3 | 1.1 | 1,693 | 96.1 | 631 | 24.0 | 0.6 | 1,191 | 92.4 | 285 |
| High school | 38.9 | 1.1 | 894 | 97.7 | 348 | 24.0 | 1.0 | 852 | 96.1 | 204 |
| Tertiary | 41.5 | 1.4 | 370 | 93.0 | 153 | 23.2 | 1.0 | 347 | 91.5 | 81 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 34.3 | 1.1 | 785 | 96.7 | 269 | 21.2 | 0.7 | 601 | 91.8 | 128 |
| Second | 35.0 | 1.0 | 862 | 96.1 | 301 | 22.0 | 0.6 | 665 | 88.8 | 147 |
| Middle | 39.0 | 1.0 | 968 | 97.5 | 378 | 20.3 | 0.6 | 856 | 94.6 | 174 |
| Fourth | 38.3 | 1.1 | 1,111 | 96.7 | 425 | 23.6 | 0.7 | 953 | 95.2 | 224 |
| Highest | 37.9 | 1.3 | 1,262 | 95.2 | 479 | 24.8 | 0.9 | 1,081 | 94.1 | 268 |
| Total 15-49 | 37.1 | 1.1 | 4,987 | 96.4 | 1,853 | 22.7 | 0.7 | 4,156 | 93.3 | 941 |

Respondents who had an injection in the past 12 months were asked where they obtained their last injection. The information is summarized in Figure 13.2. Results indicate that approximately twothirds of women and men received their medical injections at a public medical facility, and one-third received their injections at a private medical facility. Those who had received injections were further asked if the syringe and needle were taken from a new, previously unopened package. Table 13.17 shows that a majority (over 90 percent) of those who received injections in the previous 12 months were
administered injections with a syringe and needle taken from a new, unopened package. This is observed across all types of health facilities.

Those who had received injections were further asked if the syringe and needle were taken from a new, previously unopened package. Table 13.17 shows that a majority (over 90 percent) of those who received injections in the previous 12 months were administered injections with a syringe and needle taken from a new, unopened package. This is observed across all types of health facilities.

Figure 13.2 Type of Facility Where Last Medical Injection Was Received


### 13.11 HIV/AIDS Knowledge and Sexual Behaviour among Youth

This section addresses HIV and AIDS-related knowledge and sexual behaviour among youth age 15-24. Special attention is paid to this group because it accounts for half of all new HIV infections worldwide (Ross et al., 2006). In addition to knowledge of HIV transmission, data are presented on age at first sex, condom use, age differences between sexual partners, and sex within the context of alcohol use. The section concludes with data on HIV testing among youth.

### 13.11.1 HIV/AIDS-Related Knowledge among Young Adults

Knowledge of how HIV is transmitted is crucial in enabling young people to avoid contracting the virus. Young people are often at greater risk because they may have shorter relationships and with more partners, or engage in other risky behaviours. As discussed earlier, comprehensive knowledge is defined as knowing that: 1) people can reduce their chances of getting HIV by having sex with only one uninfected, faithful partner and by using condoms consistently, 2) a healthy-looking person can have HIV, and 3) HIV cannot be transmitted by mosquito bites or by sharing food with a person who has HIV.

Young respondents were asked the same set of questions on facts and beliefs about HIV transmission as other respondents. Information on the age group's overall level of knowledge of major methods of avoiding HIV and rejection of major misconceptions were discussed previously in Tables
13.3.1 and 13.3.2. Table 13.18 presents the composite indicator, comprehensive knowledge, for young people, by background characteristics.

The results show that the proportion of young women and men with comprehensive knowledge of HIV and AIDS is low, 52 percent for both women and men. Among young women, comprehensive knowledge is higher among young people in urban areas than those in rural areas. Comprehensive knowledge increases with level of education and household wealth quintile among both women and men.

| Percentage of young women and young men age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source for condoms, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women |  |  | Men |  |  |
| Background characteristic | Percentage with comprehensive knowledge of AIDS | Percentage who know a condom source ${ }^{2}$ | Number of women | $\begin{gathered} \hline \text { Percentage } \\ \text { with } \\ \text { comprehensive } \\ \text { knowledge }^{\text {of AIDS }} \\ \hline \end{gathered}$ | Percentage who know a condom source ${ }^{2}$ | Number of men |
| Age |  |  |  |  |  |  |
| 15-19 | 52.0 | 80.3 | 1,274 | 50.4 | 84.2 | 1,323 |
| 15-17 | 51.4 | 76.0 | 788 | 46.3 | 80.9 | 867 |
| 18-19 | 52.9 | 87.1 | 485 | 58.1 | 90.6 | 456 |
| 20-24 | 52.2 | 91.7 | 1,046 | 55.2 | 93.8 | 886 |
| 20-22 | 53.7 | 92.3 | 668 | 55.3 | 94.0 | 582 |
| 23-24 | 49.5 | 90.7 | 379 | 55.0 | 93.3 | 304 |
| Marital status |  |  |  |  |  |  |
| Never married | 54.7 | 84.3 | 1,867 | 52.6 | 87.9 | 2,128 |
| Ever had sex | 53.4 | 90.2 | 1,016 | 55.2 | 94.2 | 902 |
| Never had sex | 56.3 | 77.2 | 851 | 50.6 | 83.2 | 1,226 |
| Ever married | 41.2 | 90.1 | 452 | 46.4 | 92.6 | 81 |
| Residence |  |  |  |  |  |  |
| Urban | 61.0 | 88.8 | 543 | 58.7 | 92.1 | 447 |
| Rural | 49.4 | 84.4 | 1,776 | 50.7 | 87.0 | 1,762 |
| Region |  |  |  |  |  |  |
| Hhohho | 54.9 | 84.8 | 574 | 57.2 | 86.8 | 509 |
| Manzini | 54.6 | 83.1 | 780 | 51.7 | 89.9 | 737 |
| Shiselweni | 48.2 | 87.5 | 520 | 50.0 | 88.0 | 521 |
| Lubombo | 48.5 | 87.8 | 446 | 50.5 | 86.5 | 443 |
| Education |  |  |  |  |  |  |
| No education | 21.5 | 77.7 | 86 | 16.8 | 77.0 | 81 |
| Lower primary | 26.9 | 73.2 | 138 | 19.8 | 73.7 | 280 |
| Higher primary | 38.6 | 81.4 | 636 | 47.1 | 85.0 | 629 |
| Secondary | 57.8 | 87.5 | 972 | 59.7 | 93.0 | 760 |
| High school | 69.9 | 91.1 | 431 | 73.8 | 95.2 | 405 |
| Tertiary | 77.5 | 92.9 | 57 | 71.0 | 91.7 | 53 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 38.8 | 78.4 | 378 | 38.3 | 83.9 | 357 |
| Second | 48.2 | 86.1 | 414 | 48.1 | 84.7 | 406 |
| Middle | 50.3 | 87.8 | 462 | 53.4 | 86.3 | 518 |
| Fourth | 55.5 | 87.0 | 537 | 54.0 | 90.5 | 504 |
| Highest | 62.8 | 86.2 | 528 | 64.9 | 94.0 | 425 |
| Total | 52.1 | 85.4 | 2,320 | 52.3 | 88.1 | 2,209 |

${ }^{1}$ Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention. The components of comprehensive knowledge are presented in Tables 13.2, 13.3.1, and 13.3.2.
${ }^{2}$ Friends, family members, and home are not considered a source for condoms.

### 13.11.2 Knowledge of Condom Sources among Young Adults

Condom use among young adults plays an important role in preventing the transmission of HIV and other sexually transmitted infections, as well as preventing unwanted pregnancies. Knowledge of a source for condoms enables young adults to obtain and use condoms. Table 13.18 shows that 85 percent of young women and 88 percent of young men know a source where they can get condoms. The proportion of young people who know where to get condoms increases with level of education and wealth quintile.

### 13.11.3 Age at First Sex

Since HIV transmission in Swaziland occurs predominantly through heterosexual intercourse between an infected and a non-infected person, age at first intercourse marks the point at which most individuals first risk exposure to the virus. Table 13.19 shows the proportion of women and men in the 15-24 age cohort who had sex before age 15 and before age 18. Seven percent of young women and


5 percent of young men had sex by age 15 while 48 percent of young women and 34 percent of young men had sex by age 18, which indicates that young women start having sexual intercourse at a younger age than young men. For both women and men, these proportions are higher among ever-married respondents than never-married respondents. The proportion of young people who had sex before the ages of 15 and 18 decreases dramatically with increasing education.

Figure 13.3 shows the distribution of young people by sexual practices, abstinence, being faithful to one partner, and using condoms.

Figure 13.3 Abstinence, Being Faithful, and Condom Use (ABC) among Young Women and Men


Note: Data are for the 12 months preceding the survey.
SDHS 2006-07

### 13.11.4 Condom Use at First Sex

Consistent condom use is promoted by HIV control programmes to reduce the risk of sexual transmission of HIV among sexually active young adults. Young people who use condoms at first sex are more likely to maintain condom use later in life. Condom use at first sex serves as an indicator of reduced risk of exposure to HIV at the beginning of sexual activity.

Table 13.20 shows that, among young people age $15-24$ who have ever had sex, 43 percent of women and 49 percent of men used condoms during first sexual intercourse. Never-married young women and men were more likely than ever-married young women and men to report using a condom the first time they had sex. Knowledge of condom source among young men is associated with higher use. Higher educational attainment, higher wealth quintile, and urban residence positively influence the likelihood that young women and men will use condoms the first time they have sexual intercourse.

| Among young women and young men age 15-24 who have ever had sexual intercourse, percentage who used a condom the first time they had sexual intercourse, by background characteristics, Swaziland 2006-07 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Women |  | Men |  |
| Background characteristic | Percentage who used a condom at first sexual intercourse | Number of women who have ever had sexual intercourse | Percentage who used a condom at first sexual intercourse | Number of men who have ever had sexual intercourse |
| Age |  |  |  |  |
| 15-19 | 52.7 | 527 | 52.3 | 286 |
| 15-17 | 50.3 | 214 | 50.1 | 103 |
| 18-19 | 54.3 | 313 | 53.6 | 183 |
| 20-24 | 37.9 | 941 | 48.0 | 697 |
| 20-22 | 42.0 | 592 | 49.1 | 432 |
| 23-24 | 31.1 | 349 | 46.3 | 266 |
| Marital status |  |  |  |  |
| Never married | 47.3 | 1,016 | 50.3 | 902 |
| Ever married | 34.1 | 452 | 37.3 | 81 |
| Knows condom source ${ }^{1}$ |  |  |  |  |
| Yes | 43.2 | 1,324 | 50.2 | 925 |
| No | 43.1 | 144 | 34.6 | 58 |
| Residence |  |  |  |  |
| Urban | 52.4 | 372 | 56.7 | 247 |
| Rural | 40.1 | 1,097 | 46.7 | 736 |
| Region |  |  |  |  |
| Hhohho | 46.8 | 359 | 47.0 | 221 |
| Manzini | 45.7 | 499 | 56.7 | 358 |
| Shiselweni | 39.1 | 306 | 46.4 | 209 |
| Lubombo | 39.1 | 304 | 41.2 | 196 |
| Education |  |  |  |  |
| No education | 27.4 | 78 | 37.2 | 46 |
| Lower primary | 32.5 | 105 | 40.3 | 117 |
| Higher primary | 35.9 | 395 | 39.6 | 216 |
| Secondary | 45.8 | 563 | 49.7 | 315 |
| High school | 54.1 | 286 | 59.7 | 251 |
| Tertiary | (60.1) | 42 | (73.9) | 38 |
| Wealth quintile |  |  |  |  |
| Lowest | 30.9 | 257 | 40.9 | 147 |
| Second | 34.8 | 282 | 37.6 | 154 |
| Middle | 45.3 | 292 | 46.1 | 228 |
| Fourth | 51.9 | 318 | 55.9 | 255 |
| Highest | 50.1 | 319 | 59.6 | 199 |
| Total | 43.2 | 1,468 | 49.3 | 983 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. <br> ${ }^{1}$ Friends, family members, and home are not considered a source for condoms. |  |  |  |  |

### 13.11.5 Abstinence and Premarital Sex

Premarital sex and the length of the interval between sexual initiation and marriage (or living together) are among the factors that predispose people to HIV infection. Table 13.21 focuses on nevermarried young people and shows the percentage who have never had sex, the percentage who had sex in the 12 months preceding the survey, and among those, the percentage who used a condom the last time they had sex. The data show that 46 percent of young women and 58 percent of young men reported that they had never had sex, and the proportion is somewhat higher among young people in rural areas. Among those who reported having sex in the 12 months preceding the survey, more young men ( 70 percent) than young women ( 54 percent) reported using a condom during last sexual intercourse. The percentage using condoms increases with increasing level of education and wealth quintile.

Table 13.21 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth
Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and, among those who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Swaziland 2006-07

|  | Women |  |  |  |  | Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Percentage who have never had sexual intercourse | Percentage who had sexual intercourse in past 12 months | Number of nevermarried women | Percentage who used condom at last sexual intercourse | Number of women | Percentage who have never had sexual intercourse | Percentage who had sexual intercourse in past 12 months | Number of nevermarried men | Percentage who used condom at last sexual intercourse | Number of men |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 63.2 | 30.4 | 1,181 | 52.1 | 359 | 78.6 | 14.6 | 1,320 | 68.6 | 193 |
| 15-17 | 74.9 | 20.5 | 767 | 50.2 | 157 | 88.1 | 7.4 | 867 | 64.4 | 65 |
| 18-19 | 41.5 | 48.8 | 414 | 53.5 | 202 | 60.3 | 28.3 | 453 | 70.7 | 128 |
| 20-24 | 15.3 | 69.6 | 686 | 55.6 | 478 | 23.4 | 59.9 | 807 | 71.0 | 484 |
| 20-22 | 16.2 | 68.2 | 468 | 55.6 | 319 | 27.2 | 56.6 | 554 | 68.8 | 313 |
| 23-24 | 13.4 | 72.7 | 218 | 55.5 | 159 | 15.1 | 67.3 | 254 | 75.2 | 171 |
| Knows condom source ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |
| Yes | 41.8 | 48.4 | 1,574 | 54.5 | 762 | 54.6 | 34.6 | 1,870 | 71.3 | 646 |
| No | 66.2 | 25.5 | 293 | 50.2 | 75 | 79.8 | 11.9 | 258 | (49.4) | 31 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 40.9 | 48.5 | 420 | 63.6 | 204 | 47.1 | 41.6 | 425 | 80.3 | 177 |
| Rural | 47.0 | 43.8 | 1,447 | 51.0 | 633 | 60.3 | 29.4 | 1,703 | 66.8 | 500 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 49.3 | 42.4 | 436 | 57.8 | 185 | 59.3 | 30.1 | 486 | 81.6 | 146 |
| Manzini | 44.4 | 43.0 | 632 | 55.5 | 272 | 53.2 | 34.1 | 712 | 73.2 | 243 |
| Shiselweni | 46.7 | 45.3 | 458 | 54.4 | 207 | 61.2 | 29.1 | 510 | 61.6 | 148 |
| Lubombo | 41.5 | 50.8 | 342 | 47.5 | 174 | 58.8 | 33.2 | 419 | 62.8 | 139 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | (16.8) | (73.1) | 46 | (35.6) | 34 | 48.2 | 37.7 | 73 | (49.0) | 27 |
| Lower primary | 32.8 | 56.7 | 100 | 42.0 | 57 | 62.5 | 29.8 | 261 | 63.5 | 78 |
| Higher primary | 49.0 | 41.6 | 493 | 48.5 | 205 | 67.3 | 25.9 | 614 | 63.7 | 159 |
| Secondary | 50.7 | 41.1 | 807 | 52.0 | 331 | 60.7 | 29.4 | 733 | 69.8 | 215 |
| High school | 38.8 | 49.1 | 374 | 67.1 | 184 | 39.1 | 42.8 | 396 | 79.3 | 169 |
| Tertiary | (32.3) | (56.4) | 47 | (81.6) | 27 | 29.0 | 54.5 | 52 | (97.4) | 28 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 43.8 | 43.9 | 277 | 37.3 | 122 | 63.0 | 28.4 | 334 | 60.7 | 95 |
| Second | 39.7 | 51.8 | 333 | 49.5 | 172 | 63.9 | 26.8 | 395 | 65.1 | 106 |
| Middle | 45.3 | 46.4 | 375 | 55.7 | 174 | 57.3 | 31.9 | 506 | 64.9 | 161 |
| Fourth | 48.9 | 42.3 | 449 | 56.1 | 190 | 52.6 | 35.3 | 473 | 76.1 | 167 |
| Highest | 48.1 | 41.4 | 433 | 66.1 | 180 | 53.6 | 35.4 | 420 | 79.6 | 149 |
| Total | 45.6 | 44.8 | 1,867 | 54.1 | 837 | 57.6 | 31.8 | 2,128 | 70.3 | 677 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Friends, family members, and home are not considered a source for condoms.

### 13.11.6 Higher-Risk Sexual Intercourse and Condom Use among Young People

Tables 13.22 .1 and 13.22 .2 focus on young women and men age $15-24$ who had sexual intercourse in the past 12 months. They show the proportion who engaged in higher-risk sex (i.e., sexual intercourse with a non-marital, non-cohabiting partner) in the past 12 months, and of those, the proportion who used a condom at last higher-risk sex. As noted previously, by definition, sexual intercourse among never-married young people is considered higher-risk sex.

Table 13.22.1 Higher-risk sexual intercourse among youth and condom use at last higher-risk intercourse in the past 12 months: Women

Among young women age 15-24 who had sexual intercourse in the past 12 months, the percentage who had higher-risk sexual intercourse in the past 12 months, and among those, the percentage reporting that a condom was used at last higher-risk intercourse, by background characteristics, Swaziland 2006-07

| Background characteristic | Women 15-24 who had sexual intercourse in past 12 months |  | Women 15-24 who had higher-risk intercourse in past 12 months |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had higher-risk intercourse in past 12 months $^{1}$ | Number of women | Percentage who reported using a condom at last higher-risk intercourse ${ }^{1}$ | Number of women |
| Age |  |  |  |  |
| 15-19 | 82.2 | 451 | 51.9 | 371 |
| 15-17 | 89.4 | 179 | 50.0 | 160 |
| 18-19 | 77.5 | 272 | 53.3 | 211 |
| 20-24 | 61.1 | 834 | 55.8 | 510 |
| 20-22 | 63.4 | 517 | 56.1 | 328 |
| 23-24 | 57.4 | 317 | 55.3 | 182 |
| Marital status |  |  |  |  |
| Never married | 99.3 | 837 | 54.1 | 832 |
| Ever married | 10.9 | 447 | (56.1) | 49 |
| Knows condom source ${ }^{2}$ |  |  |  |  |
| Yes | 68.8 | 1,166 | 54.8 | 802 |
| No | 66.3 | 119 | 47.8 | 79 |
| Residence |  |  |  |  |
| Urban | 67.5 | 324 | 64.4 | 219 |
| Rural | 68.9 | 960 | 50.8 | 662 |
| Region |  |  |  |  |
| Hhohho | 61.4 | 322 | 58.9 | 198 |
| Manzini | 69.2 | 416 | 56.9 | 288 |
| Shiselweni | 78.3 | 269 | 53.5 | 210 |
| Lubombo | 66.3 | 278 | 45.5 | 184 |
| Education |  |  |  |  |
| No education | 54.7 | 73 | (44.4) | 40 |
| Lower primary | 67.4 | 93 | 39.4 | 63 |
| Higher primary | 63.8 | 348 | 48.9 | 222 |
| Secondary | 68.4 | 493 | 52.2 | 337 |
| High school | 79.0 | 240 | 67.4 | 190 |
| Tertiary | 76.7 | 36 | (77.7) | 28 |
| Wealth quintile |  |  |  |  |
| Lowest | 58.7 | 221 | 38.5 | 130 |
| Second | 69.3 | 254 | 49.1 | 176 |
| Middle | 69.2 | 261 | 55.6 | 181 |
| Fourth | 73.8 | 277 | 56.5 | 205 |
| Highest | 69.8 | 271 | 65.9 | 189 |
| Total 15-24 | 68.5 | 1,285 | 54.2 | 880 |

[^18]| Table 13.22.2 Higher-risk sexual intercourse among youth and condom use at last higher-risk intercourse in the past 12 months: Men |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Among young men age 15-24 who had sexual intercourse in the past 12 months, the percentage who had higher-risk sexual intercourse in the past 12 months, and among those, the percentage reporting that a condom was used at last higher-risk intercourse, by background characteristics, Swaziland 2006-07 |  |  |  |  |
|  | Men 15-24 who had sexual intercourse in past 12 months |  | Men 15-24 who had higher-risk intercourse in past 12 months |  |
| Background characteristic | Percentage who had higher-risk intercourse in past 12 months ${ }^{1}$ | Number of men | Percentage <br> who reported <br> using a <br> condom at last <br> higher-risk <br> intercourse ${ }^{1}$ | Number of men |
| Age |  |  |  |  |
| 15-19 | 97.5 | 196 | 68.8 | 191 |
| 15-17 | 100.0 | 65 | 64.4 | 65 |
| 18-19 | 96.3 | 131 | 71.0 | 126 |
| 20-24 | 90.0 | 559 | 71.1 | 503 |
| 20-22 | 92.9 | 341 | 68.5 | 317 |
| 23-24 | 85.4 | 218 | 75.5 | 187 |
| Marital status |  |  |  |  |
| Never married | 98.1 | 677 | 70.3 | 664 |
| Ever married | 38.1 | 78 | 74.2 | 30 |
| Knows condom source ${ }^{2}$ |  |  |  |  |
| Yes | 92.3 | 718 | 71.5 | 663 |
| No | (84.7) | 37 | (48.8) | 31 |
| Residence |  |  |  |  |
| Urban | 90.6 | 199 | 80.0 | 181 |
| Rural | 92.4 | 556 | 67.1 | 513 |
| Region |  |  |  |  |
| Hhohho | 89.1 | 169 | 82.1 | 151 |
| Manzini | 93.9 | 268 | 73.6 | 252 |
| Shiselweni | 96.1 | 158 | 60.5 | 152 |
| Lubombo | 87.4 | 160 | 63.0 | 140 |
| Education |  |  |  |  |
| No education | (85.0) | 36 | (49.7) | 30 |
| Lower primary | 83.0 | 95 | 62.5 | 79 |
| Higher primary | 91.9 | 173 | 64.1 | 159 |
| Secondary | 94.3 | 242 | 70.9 | 228 |
| High school | 94.1 | 179 | 78.6 | 169 |
| Tertiary | (96.3) | 30 | (97.4) | 29 |
| Wealth quintile |  |  |  |  |
| Lowest | 85.9 | 117 | 60.7 | 101 |
| Second | 92.4 | 117 | 64.2 | 108 |
| Middle | 94.7 | 171 | 65.7 | 162 |
| Fourth | 88.7 | 197 | 76.7 | 175 |
| Highest | 97.2 | 153 | 79.4 | 149 |
| Total 15-24 | 91.9 | 755 | 70.4 | 694 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. <br> ${ }^{1}$ Sexual intercourse with a non-marital, non-cohabiting partner <br> ${ }^{2}$ Friends, family members, and home are not considered a source for condoms. |  |  |  |  |

Among sexually active young people age 15-24, 69 percent of women and 92 percent of men reported engaging in higher-risk sexual intercourse in the 12 months preceding the survey. Fifty-four percent of these women and 70 percent of the men used a condom at last higher-risk sexual intercourse. The age pattern in higher-risk sexual behaviour for women and men age $15-24$ is a reflection of their age pattern of entry into marriage. The proportion who engage in higher-risk sexual intercourse declines with age, reflecting the increased proportion of men and women who are married or living with a sexual partner. The likelihood of engaging in higher-risk sexual intercourse increases with level of education and
wealth quintile, especially among women. Among young men, the likelihood of engaging in higher-risk sex is high for most background characteristics. Among both young women and young men, use of condoms at last higher-risk sexual intercourse increases with level of education and wealth quintile.

### 13.11.7 Cross-Generational Sexual Partners

To examine age differences between sexual partners, women age 15-19 who had higher-risk sex in the 12 months preceding the survey were asked the age of all their partners. In the event they did not know a partner's exact age, they were asked if the partner was older or younger than they were, and if older, whether the partner was 10 or more years older. The results are shown in Table 13.23. Seven percent of young women who had engaged in higher-risk sex in the past 12 months reported that they had sexual intercourse with a man who was 10 or more years older. In general, this proportion is higher among older girls, girls living in rural areas, and in Hhohho. The likelihood of having higher-risk sexual intercourse with a man ten or more years older seems to decrease with increasing education.

### 13.11.8 Drunkenness during Sexual Intercourse among Young People

Engaging in sexual intercourse while under the influence of alcohol can impair judgment, compromise power relations, and increase risky sexual behaviour. Respondents who had sex in the past 12 months were asked (for each partner) if they or their partner drank alcohol the last time they had sexual intercourse with that partner, and whether they or their partner was drunk. As shown in Table 13.24, the overall prevalence of sexual intercourse when the respondent or the respondent's partner was drunk is low for both women and men ( 2 percent for women and 3 percent for men).

Table 13.23 Age mixing in sexual relationships among women age 15-19
Percentage of women age 15-19 who had higher-risk sexual intercourse in the past 12 months with a man who was 10 or more years older than themselves, by background characteristics, Swaziland 2006-07

| Background characteristic | Percentage of women who had higher-risk intercourse with a man 10+ years older ${ }^{1}$ | Number of women who had higher-risk intercourse in the past 12 months ${ }^{1}$ |
| :---: | :---: | :---: |
| Age |  |  |
| 15-17 | 5.1 | 160 |
| 18-19 | 8.7 | 211 |
| Marital status |  |  |
| Never married | 6.8 | 358 |
| Ever married | * | 13 |
| Knows condom source ${ }^{2}$ |  |  |
| Yes | 7.6 | 330 |
| No | (3.5) | 40 |
| Residence |  |  |
| Urban | 5.7 | 84 |
| Rural | 7.6 | 286 |
| Region |  |  |
| Hhohho | 10.6 | 76 |
| Manzini | 7.0 | 124 |
| Shiselweni | 5.6 | 85 |
| Lubombo | 5.8 | 85 |
| Education |  |  |
| No education | * | 15 |
| Lower primary | 13.5 | 34 |
| Higher primary | 8.6 | 124 |
| Secondary | 8.1 | 139 |
| High school | 0.0 | 56 |
| Tertiary | * | 3 |
| Wealth quintile |  |  |
| Lowest | 5.6 | 63 |
| Second | 5.6 | 76 |
| Middle | 2.2 | 78 |
| Fourth | 13.2 | 90 |
| Highest | 8.0 | 64 |
| Total 15-19 | 7.1 | 371 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Sexual intercourse with a non-marital, non-cohabiting partner
${ }^{2}$ Friends, family members, and home are not considered a source for condoms.

| Table 13.24 Drunkenness during sexual intercourse among youth |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among all young women and young men age 15-24, the percentage who had sexual intercourse in the past 12 months while being drunk and percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
|  | Women |  |  | Men |  |  |
| Background characteristic | Percentage who had sexua intercourse in the past 12 months when drunk | Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk | Number of women | Percentage who had sexual intercourse in the past 12 months when drunk | Percentage who had sexual intercourse in the past 12 months when drunk or with a partner who was drunk | Number of men |
| Age |  |  |  |  |  |  |
| 15-19 | 0.0 | 1.0 | 1,274 | 0.9 | 1.0 | 1,323 |
| 15-17 | 0.0 | 1.0 | 788 | 0.6 | 0.6 | 867 |
| 18-19 | 0.0 | 0.8 | 485 | 1.6 | 1.9 | 456 |
| 20-24 | 0.6 | 3.8 | 1,046 | 5.9 | 6.2 | 886 |
| 20-22 | 0.7 | 3.3 | 668 | 6.1 | 6.2 | 582 |
| 23-24 | 0.6 | 4.5 | 379 | 5.6 | 6.0 | 304 |
| Marital status |  |  |  |  |  |  |
| Never married | 0.1 | 1.7 | 1,867 | 2.8 | 3.0 | 2,128 |
| Ever married | 1.0 | 4.4 | 452 | 5.4 | 5.4 | 81 |
| Knows condom source |  |  |  |  |  |  |
| Yes | 0.3 | 2.5 | 1,982 | 3.3 | 3.4 | 1,945 |
| No | 0.0 | 0.7 | 338 | 0.2 | 0.6 | 264 |
| Residence |  |  |  |  |  |  |
| Urban | 0.4 | 2.7 | 543 | 4.3 | 4.6 | 447 |
| Rural | 0.3 | 2.1 | 1,776 | 2.6 | 2.7 | 1,762 |
| Region |  |  |  |  |  |  |
| Hhohho | 0.3 | 2.5 | 574 | 3.9 | 3.9 | 509 |
| Manzini | 0.1 | 1.7 | 780 | 3.7 | 3.8 | 737 |
| Shiselweni | 0.4 | 2.8 | 520 | 1.6 | 1.8 | 521 |
| Lubombo | 0.4 | 2.1 | 446 | 2.2 | 2.4 | 443 |
| Education |  |  |  |  |  |  |
| No education | 2.6 | 6.9 | 86 | 2.9 | 2.9 | 81 |
| Lower primary | 0.0 | 3.0 | 138 | 0.7 | 0.7 | 280 |
| Higher primary | 0.1 | 1.9 | 636 | 2.3 | 2.3 | 629 |
| Secondary | 0.1 | 1.9 | 972 | 4.2 | 4.6 | 760 |
| High school | 0.6 | 2.1 | 431 | 3.3 | 3.6 | 405 |
| Tertiary | 0.0 | 3.0 | 57 | 0.0 | 0.0 | 53 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 0.6 | 2.2 | 378 | 1.7 | 1.7 | 357 |
| Second | 0.2 | 2.9 | 414 | 2.8 | 3.1 | 406 |
| Middle | 0.2 | 2.5 | 462 | 3.6 | 3.6 | 518 |
| Fourth | 0.3 | 1.6 | 537 | 3.2 | 3.4 | 504 |
| Highest | 0.1 | 2.1 | 528 | 2.9 | 3.3 | 425 |
| Total 15-24 | 0.3 | 2.2 | 2,320 | 2.9 | 3.1 | 2,209 |

${ }^{1}$ Friends, family members, and home are not considered a source for condoms.

### 13.11.9 HIV Testing and Counselling among Young People

Knowledge of one's own HIV sero-status can motivate a person to practice safe sexual behaviour to avoid transmitting the virus to others. Table 13.25 shows for young women and young men age 15-24 who had sexual intercourse in the past 12 months, the percentage who reported having an HIV test in the past 12 months and received the results of the test. Young women are about four times as likely as young men to have been tested for HIV (28 percent and 7 percent, respectively). While there are no substantial differences in HIV testing levels by most background characteristics, older youth and those who have ever been married are more likely than other youth to have been tested for HIV.

Table 13.25 Recent HIV tests among youth
Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, the percentage who have had an HIV test in the past 12 months and received the results of the test, by background characteristics, Swaziland 2006-07

| Background characteristic | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who have been tested for HIV and received results in the past 12 months | Number of women | Percentage who have been tested for HIV and received results in the past 12 months | Number of men |
| Age |  |  |  |  |
| 15-19 | 22.5 | 451 | 4.3 | 196 |
| 15-17 | 18.3 | 179 | 1.9 | 65 |
| 18-19 | 25.3 | 272 | 5.4 | 131 |
| 20-24 | 30.7 | 834 | 7.3 | 559 |
| 20-22 | 31.7 | 517 | 5.0 | 341 |
| 23-24 | 29.0 | 317 | 10.9 | 218 |
| Marital status |  |  |  |  |
| Never married | 26.4 | 837 | 5.8 | 677 |
| Ever married | 30.6 | 447 | 13.2 | 78 |
| Knows condom source ${ }^{1}$ |  |  |  |  |
| Yes | 28.1 | 1,166 | 6.4 | 718 |
| No | 25.2 | 119 | (8.8) | 37 |
| Residence |  |  |  |  |
| Urban | 27.6 | 324 | 5.4 | 199 |
| Rural | 27.9 | 960 | 6.9 | 556 |
| Region |  |  |  |  |
| Hhohho | 23.1 | 322 | 3.7 | 169 |
| Manzini | 30.7 | 416 | 7.9 | 268 |
| Shiselweni | 32.3 | 269 | 6.3 | 158 |
| Lubombo | 24.8 | 278 | 7.5 | 160 |
| Education |  |  |  |  |
| No education | 21.3 | 73 | (6.6) | 36 |
| Lower primary | 16.7 | 93 | 8.3 | 95 |
| Higher primary | 28.9 | 348 | 5.0 | 173 |
| Secondary | 26.2 | 493 | 3.5 | 242 |
| High school | 35.0 | 240 | 10.5 | 179 |
| Tertiary | (33.3) | 36 | (10.3) | 30 |
| Wealth quintile |  |  |  |  |
| Lowest | 25.9 | 221 | 5.8 | 117 |
| Second | 26.5 | 254 | 9.4 | 117 |
| Middle | 29.3 | 261 | 6.5 | 171 |
| Fourth | 30.8 | 277 | 6.5 | 197 |
| Highest | 26.2 | 271 | 5.0 | 153 |
| Total 15-24 | 27.8 | 1,285 | 6.5 | 755 |

[^19]
## HIV PREVALENCE AND ASSOCIATED FACTORS

## Rachel Masuku

The 2006-07 SDHS is the first national survey in Swaziland to include HIV testing. A description of the procedures that were followed in collecting the blood samples and conducting the HIV testing is included in Chapter 1. This chapter presents information on the coverage of HIV testing among the eligible population age 2 and older, the prevalence of HIV in the individuals who were tested, and the factors associated with HIV infection in the population.

In Swaziland, as in most of sub-Saharan Africa, national HIV prevalence estimates have been derived primarily from sentinel surveillance of pregnant women. Currently, the national sentinel surveillance system consists of 17 sites in government and mission health facilities selected to represent the different groups, regions, and rural and urban populations in the country.

While the rate of HIV infection in pregnant women has been shown to be a reasonable proxy for the level in the combined male and female adult population in a number of settings (WHO and UNAIDS, 2000), there are several well-recognized limitations in estimating the HIV rate in the general adult population from data derived exclusively from pregnant women attending selected antenatal clinics. First, the ANC data do not capture any information on HIV prevalence in non-pregnant women, nor in women who either do not attend a clinic for pregnancy care or receive antenatal care at facilities not represented in the surveillance system. Pregnant women also are more at risk for HIV infection than women who may be avoiding both HIV and pregnancy through the use of condoms or women who are less sexually active and are therefore less likely to become pregnant or be exposed to HIV infection. In addition, there may be biases in the ANC surveillance data because HIV infection reduces fertility and because knowledge of HIV status may influence fertility choices. Finally, the rates among pregnant women are not a good proxy for male HIV rates.

Thus, the 2006-07 SDHS offers a valuable new resource to complement the ANC surveillance. The HIV prevalence data from the SDHS provide important information to plan the national response, evaluate programme impact, and measure progress on the National HIV/AIDS Strategic Plan 2006-2008. The understanding of the distribution of HIV within the population and the analysis of social, biological, and behavioural factors associated with HIV infection offer new insights about the HIV pandemic in Swaziland that may lead to more precisely targeted messages and interventions.

### 14.1 Coverage of HIV Testing

All women and men age 15-49 living in the households selected for the 2006/07 SDHS were eligible for the HIV testing component. Children age 2 to 14 years and older adults age 50 years and above in half the households selected for the SDHS sample were also eligible for the HIV testing.

Table 14.1 shows the coverage rates for HIV testing among eligible respondents by reason for not being tested by age and sex. HIV tests were conducted for 85 percent of the 15,144 eligible persons age 2 years and above. Among the reproductive age group (i.e., 15-49) HIV tests were carried out for 87 percent of the 5,301 eligible women and 78 percent of the 4,675 eligible men.

Table 14.1 Coverage of HIV testing among the population age 2 years and older by age
Percent distribution of population age 2 years and older eligible for HIV testing by testing status, according to residence and region unweighted), Swaziland 2006-07

| Age | Testing status |  |  |  | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { DBS } \\ \text { tested }^{1} \end{gathered}$ | Refused to provide blood $^{2}$ | Absent at the time of blood collection | Other/ missing ${ }^{3}$ |  |  |
| WOMEN |  |  |  |  |  |  |
| 2-4 | 86.8 | 8.2 | 2.5 | 2.5 | 100.0 | 485 |
| 5-9 | 92.1 | 4.3 | 2.2 | 1.4 | 100.0 | 719 |
| 10-14 | 91.7 | 4.3 | 1.5 | 2.6 | 100.0 | 817 |
| 15-19 | 90.4 | 6.6 | 1.1 | 1.9 | 100.0 | 1,332 |
| 20-24 | 86.7 | 9.6 | 1.9 | 1.8 | 100.0 | 1,095 |
| 25-29 | 84.0 | 12.1 | 1.8 | 2.1 | 100.0 | 794 |
| 30-34 | 86.1 | 11.3 | 1.2 | 1.4 | 100.0 | 662 |
| 35-39 | 86.7 | 10.2 | 1.1 | 2.0 | 100.0 | 548 |
| 40-44 | 85.0 | 11.4 | 1.7 | 1.9 | 100.0 | 474 |
| 45-49 | 89.9 | 7.3 | 1.0 | 1.8 | 100.0 | 396 |
| 50-54 | 88.2 | 10.0 | 1.2 | 0.6 | 100.0 | 170 |
| 55-59 | 88.2 | 10.1 | 0.0 | 1.7 | 100.0 | 119 |
| 60+ | 86.1 | 7.9 | 0.7 | 5.2 | 100.0 | 404 |
| Total $2+$ | 88.1 | 8.4 | 1.5 | 2.1 | 100.0 | 8,015 |
| Total 15-49 | 87.2 | 9.5 | 1.4 | 1.8 | 100.0 | 5,301 |
| MEN |  |  |  |  |  |  |
| 2-4 | 88.9 | 7.9 | 1.8 | 1.4 | 100.0 | 442 |
| 5-9 | 89.7 | 6.1 | 1.9 | 2.3 | 100.0 | 789 |
| 10-14 | 89.2 | 7.3 | 1.9 | 1.6 | 100.0 | 731 |
| 15-19 | 87.7 | 8.9 | 1.8 | 1.6 | 100.0 | 1,354 |
| 20-24 | 74.2 | 18.8 | 4.0 | 3.1 | 100.0 | 1,006 |
| 25-29 | 73.2 | 18.7 | 4.3 | 3.8 | 100.0 | 739 |
| 30-34 | 72.5 | 20.7 | 3.9 | 2.9 | 100.0 | 516 |
| 35-39 | 72.5 | 21.5 | 2.4 | 3.5 | 100.0 | 451 |
| 40-44 | 72.3 | 22.2 | 2.5 | 3.1 | 100.0 | 325 |
| 45-49 | 77.5 | 17.6 | 1.8 | 3.2 | 100.0 | 284 |
| 50-54 | 78.7 | 13.2 | 2.2 | 5.9 | 100.0 | 136 |
| 55-59 | 77.9 | 18.9 | 0.0 | 3.2 | 100.0 | 95 |
| 60+ | 83.5 | 11.1 | 1.1 | 4.2 | 100.0 | 261 |
| Total $2+$ | 81.1 | 13.7 | 2.6 | 2.7 | 100.0 | 7,129 |
| Total 15-49 | 77.6 | 16.6 | 3.0 | 2.8 | 100.0 | 4,675 |
| TOTAL |  |  |  |  |  |  |
| 2-4 | 87.8 | 8.1 | 2.2 | 1.9 | 100.0 | 927 |
| 5-9 | 90.8 | 5.2 | 2.1 | 1.9 | 100.0 | 1,508 |
| 10-14 | 90.5 | 5.7 | 1.7 | 2.1 | 100.0 | 1,548 |
| 15-19 | 89.0 | 7.8 | 1.5 | 1.7 | 100.0 | 2,686 |
| 20-24 | 80.7 | 14.0 | 2.9 | 2.4 | 100.0 | 2,101 |
| 25-29 | 78.8 | 15.3 | 3.0 | 2.9 | 100.0 | 1,533 |
| 30-34 | 80.1 | 15.4 | 2.4 | 2.0 | 100.0 | 1,178 |
| 35-39 | 80.3 | 15.3 | 1.7 | 2.7 | 100.0 | 999 |
| 40-44 | 79.8 | 15.8 | 2.0 | 2.4 | 100.0 | 799 |
| 45-49 | 84.7 | 11.6 | 1.3 | 2.4 | 100.0 | 680 |
| 50-54 | 84.0 | 11.4 | 1.6 | 2.9 | 100.0 | 306 |
| 55-59 | 83.6 | 14.0 | 0.0 | 2.3 | 100.0 | 214 |
| 60+ | 85.1 | 9.2 | 0.9 | 4.8 | 100.0 | 665 |
| Total $2+$ | 84.8 | 10.9 | 2.0 | 2.3 | 100.0 | 15,144 |
| Total 15-49 | 82.7 | 12.8 | 2.2 | 2.3 | 100.0 | 9,976 |

${ }^{1}$ Includes all dried blood samples (DBS) tested at the laboratory and for which there is a result, i.e., positive, negative, or indeterminate. Indeterminate means that the sample went through the entire algorithm, but the final result was inconclusive.
${ }^{2}$ For children age 2-14, "refused" refers to the refusal by the parent to allow the DBS sample to be collected. For never-married youth, either the parent or the youth themselves may have refused.
${ }^{3}$ Includes: 1) other results of blood collection (e.g., technical problem in the field), 2) lost specimens, 3) non-corresponding bar codes, 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc. and 5) persons for whom a final result of the testing is missing

Based on the reason for non-response, respondents who were not tested are divided into three categories:

- Those who refused testing when asked for informed consent by the technician (11 percent for individuals age 2 years and above and 13 percent for those age 15-49). There were more refusals among men (17 percent) than women (10 percent) for the age group 15-49.
- Those who were interviewed in the survey, but who were not at home when the technician arrived for testing and were not found on callbacks (2 percent for both persons age 2 years above and for persons age 15-49).
- Those for whom test results are missing for some other reason, such as they were incapable of giving consent for testing, there was a mismatch between the questionnaire and the blood sample, or there was a technical problem in taking blood (2 percent for both persons age 2 years and above and for persons age 15-49 years).

Looking at age patterns, coverage rates were at or near 90 percent among males age 2-19 years before falling steeply to a level of 74 percent in the 20-24 cohort. Coverage continued to fall gradually to a low of 72 percent among men in the 40-44 age group, before rising to 84 percent among men age 60 and older. Among women, coverage rates exceeded 90 percent for those age 5-19 years and ranged between 85 and 90 percent in the other age groups.

Table 14.2 shows coverage rates for HIV testing by residence, education, and wealth. Rural residents were more likely to be tested than their urban counterparts. For women, the rates in urban and rural areas were 80 percent and 91 percent, respectively. Among men, coverage rates were 72 percent for the urban residents and 85 percent for rural dwellers. Differences in HIV testing coverage by region are comparatively small; the highest rate was 91 percent for Shiselweni and the lowest was 86 percent for Manzini. Considering the relationship with education, those with little or no education are more likely to have been tested while men and women with high school and tertiary education were least likely to be tested. Similarly, those in the highest quintile of the wealth index were least likely to be tested.

Additional tables describing the relationship between participation in the HIV testing and characteristics related to HIV risk are presented in Appendix A (see Tables A.3-A.6). Overall, the results in those tables do not show a systematic relationship between participation in the test and variables associated with higher risk of HIV infection. The results from a multivariate analysis investigating the effect of non-response on HIV prevalence are summarized in Appendix D. This analysis also supports the conclusion that non-response did not introduce significant bias in the HIV prevalence results.

| Table 14.2 Coverage of HIV testing among population age 2 years and older by selected background characteristics |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of population age 2 years and older eligible for HIV testing by testing status, according to selected background characteristics (unweighted), Swaziland 2006-07 |  |  |  |  |  |  |
|  | Testing status |  |  |  |  |  |
| Background characteristic | $\begin{gathered} \text { DBS } \\ \text { tested }^{1} \end{gathered}$ | Refused to provide blood ${ }^{2}$ | Absent at the time of blood collection | Other/ missing ${ }^{3}$ | Total | Number |
| WOMEN |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |
| Urban | 79.7 | 16.0 | 1.9 | 2.4 | 100.0 | 2,168 |
| Rural | 91.2 | 5.5 | 1.4 | 1.9 | 100.0 | 5,847 |
| Region |  |  |  |  |  |  |
| Hhohho | 86.9 | 9.9 | 1.6 | 1.6 | 100.0 | 2,013 |
| Manzini | 86.3 | 9.8 | 1.7 | 2.3 | 100.0 | 2,317 |
| Shiselweni | 91.3 | 6.5 | 1.0 | 1.1 | 100.0 | 1,836 |
| Lubombo | 88.4 | 6.8 | 1.7 | 3.1 | 100.0 | 1,849 |
| Education |  |  |  |  |  |  |
| No education | 88.1 | 6.9 | 1.6 | 3.3 | 100.0 | 1,498 |
| Lower primary | 91.6 | 4.1 | 1.7 | 2.6 | 100.0 | 1,437 |
| Higher primary | 91.8 | 5.7 | 0.7 | 1.7 | 100.0 | 1,774 |
| Secondary | 89.1 | 8.0 | 1.6 | 1.4 | 100.0 | 1,839 |
| High school | 82.4 | 14.0 | 1.8 | 1.7 | 100.0 | 980 |
| Tertiary | 71.7 | 25.4 | 1.9 | 1.1 | 100.0 | 473 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 92.1 | 4.8 | 0.9 | 2.2 | 100.0 | 1,289 |
| Second | 91.3 | 5.0 | 2.0 | 1.7 | 100.0 | 1,297 |
| Middle | 90.0 | 6.3 | 1.3 | 2.4 | 100.0 | 1,372 |
| Fourth | 88.7 | 8.0 | 1.5 | 1.8 | 100.0 | 1,475 |
| Highest | 77.8 | 17.8 | 1.9 | 2.5 | 100.0 | 1,830 |
| Total | 88.1 | 8.4 | 1.5 | 2.1 | 100.0 | 8,015 |
| MEN |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |
| Urban | 71.7 | 22.6 | 2.9 | 2.8 | 100.0 | 2,071 |
| Rural | 85.0 | 10.0 | 2.4 | 2.6 | 100.0 | 5,058 |
| Region |  |  |  |  |  |  |
| Hhohho | 79.9 | 15.0 | 2.3 | 2.7 | 100.0 | 1,759 |
| Manzini | 79.1 | 15.2 | 3.3 | 2.5 | 100.0 | 2,023 |
| Shiselweni | 83.5 | 12.8 | 2.6 | 1.1 | 100.0 | 1,559 |
| Lubombo | 82.4 | 11.4 | 2.0 | 4.1 | 100.0 | 1,788 |
| Education |  |  |  |  |  |  |
| No education | 84.9 | 10.3 | 1.7 | 3.2 | 100.0 | 1,315 |
| Lower primary | 86.7 | 8.5 | 2.1 | 2.7 | 100.0 | 1,552 |
| Higher primary | 83.3 | 12.1 | 2.5 | 2.0 | 100.0 | 1,416 |
| Secondary | 80.3 | 14.8 | 2.5 | 2.5 | 100.0 | 1,385 |
| High school | 74.6 | 18.4 | 4.2 | 2.8 | 100.0 | 967 |
| Tertiary | 63.0 | 30.9 | 3.3 | 2.9 | 100.0 | 486 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 86.5 | 7.9 | 2.5 | 3.1 | 100.0 | 1,057 |
| Second | 81.9 | 11.4 | 2.8 | 3.8 | 100.0 | 1,024 |
| Middle | 83.1 | 12.1 | 2.7 | 2.1 | 100.0 | 1,167 |
| Fourth | 77.8 | 17.6 | 2.1 | 2.5 | 100.0 | 1,333 |
| Highest | 71.9 | 22.3 | 3.1 | 2.7 | 100.0 | 1,718 |
| Total | 81.1 | 13.7 | 2.6 | 2.7 | 100.0 | 7,129 |
|  |  |  |  |  |  | ntinued... |


| Table 14.2-Continued |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Testing status |  |  |  | Total | Number |
|  | $\begin{gathered} \mathrm{DBS} \\ \text { tested }^{1} \end{gathered}$ | Refused to provide blood $^{2}$ | Absent at the time of blood collection | Other/ missing ${ }^{3}$ |  |  |
| TOTAL |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |
| Urban | 75.8 | 19.2 | 2.4 | 2.6 | 100.0 | 4,239 |
| Rural | 88.3 | 7.6 | 1.9 | 2.2 | 100.0 | 10,905 |
| Region |  |  |  |  |  |  |
| Hhohho | 83.6 | 12.3 | 1.9 | 2.1 | 100.0 | 3,772 |
| Manzini | 82.9 | 12.3 | 2.4 | 2.4 | 100.0 | 4,340 |
| Shiselweni | 87.7 | 9.4 | 1.7 | 1.1 | 100.0 | 3,395 |
| Lubombo | 85.5 | 9.0 | 1.9 | 3.6 | 100.0 | 3,637 |
| Education |  |  |  |  |  |  |
| No education | 86.6 | 8.5 | 1.6 | 3.3 | 100.0 | 2,813 |
| Lower primary | 89.1 | 6.4 | 1.9 | 2.6 | 100.0 | 2,989 |
| Higher primary | 88.1 | 8.6 | 1.5 | 1.8 | 100.0 | 3,190 |
| Secondary | 85.3 | 10.9 | 2.0 | 1.8 | 100.0 | 3,224 |
| High school | 78.5 | 16.2 | 3.0 | 2.3 | 100.0 | 1,947 |
| Tertiary | 67.3 | 28.2 | 2.6 | 2.0 | 100.0 | 959 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 89.6 | 6.2 | 1.6 | 2.6 | 100.0 | 2,346 |
| Second | 87.2 | 7.8 | 2.4 | 2.6 | 100.0 | 2,321 |
| Middle | 86.8 | 8.9 | 1.9 | 2.3 | 100.0 | 2,539 |
| Fourth | 83.5 | 12.6 | 1.8 | 2.1 | 100.0 | 2,808 |
| Highest | 74.9 | 20.0 | 2.5 | 2.6 | 100.0 | 3,548 |
| Total | 84.8 | 10.9 | 2.0 | 2.3 | 100.0 | 15,144 |
| Note: Totals include 18 respondents for whom information on education level is missing ( 12 women and 6 men). <br> ${ }^{1}$ Includes all dried blood samples (DBS) tested at the laboratory and for which there is a result, i.e., positive, negative, or indeterminate. Indeterminate means that the sample went through the entire algorithm, but the final result was inconclusive. <br> ${ }^{2}$ For children (age 2-14), "refused" refers to the refusal by the parent to allow the DBS sample to be collected. For never-married youth, either the parent or the youth themselves may have refused. <br> ${ }^{3}$ Includes: 1) other results of blood collection (e.g., technical problem in the field), 2) lost specimens, 3) non-corresponding bar codes, and 4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc. and 5) persons for whom a final result of the testing is missing |  |  |  |  |  |  |

### 14.2 HIV Prevalence

### 14.2.1 HIV Prevalence by Age

The 2006-07 SDHS found that 19 percent of the population age 2 years and older and 26 percent of the population age $15-49$ is living with HIV/AIDS (Table 14.3). HIV prevalence is higher among women than men ( 22 percent and 15 percent, respectively).

Looking at the age pattern, Table 14.3 shows that HIV prevalence is 5 percent among the population age 2-4 and declines gradually to 3 percent in the 10-14 age group. The prevalence among women age $15-19$ is 10 percent compared with 2 percent among men in the same age. Prevalence rises sharply with age among women age 15 years and older, peaking at 49 percent among those in the 25-29 age group before falling to a level of 7 percent among those age 60 years and older. Among men age 15 years and older, the HIV rate rises more gradually with age to a peak at age 35-39 (45 percent), before declining to 13 percent among men age 60 years and older.

Table 14.3 HIV prevalence among population age 2 years and older by age
Among the de facto population age 2 years and older who were tested, the percentage HIV- 1 positive, by age, Swaziland 2006-07

| Age | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| 2-4 | 4.8 | 427 | 5.5 | 393 | 5.1 | 820 |
| 5-9 | 3.6 | 670 | 4.8 | 697 | 4.2 | 1,367 |
| 10-14 | 3.3 | 741 | 1.9 | 651 | 2.6 | 1,392 |
| 15-19 | 10.1 | 1,151 | 1.9 | 1,272 | 5.8 | 2,423 |
| 20-24 | 38.4 | 922 | 12.4 | 779 | 26.5 | 1,701 |
| 25-29 | 49.2 | 648 | 27.8 | 553 | 39.3 | 1,201 |
| 30-34 | 45.2 | 536 | 43.7 | 380 | 44.6 | 916 |
| 35-39 | 37.7 | 441 | 44.9 | 321 | 40.8 | 762 |
| 40-44 | 27.9 | 382 | 40.7 | 230 | 32.7 | 612 |
| 45-49 | 21.4 | 342 | 27.9 | 229 | 24.0 | 571 |
| 50-54 | 24.3 | 144 | 28.3 | 106 | 26.0 | 250 |
| 55-59 | 9.6 | 102 | 17.4 | 70 | 12.7 | 172 |
| 60+ | 7.0 | 342 | 13.3 | 227 | 9.5 | 569 |
| Total $2+$ | 22.1 | 6,850 | 14.9 | 5,906 | 18.8 | 12,756 |
| Total 15-49 | 31.1 | 4,424 | 19.7 | 3,763 | 25.9 | 8,187 |
| Total 50+ | 11.7 | 588 | 17.9 | 402 | 14.2 | 990 |

${ }^{1}$ HIV positive refers only to those infected with HIV-1. For population age 12 and older, only individuals who were interviewed and tested are considered in the calculation of the HIV rate.

### 14.2.2 HIV Prevalence by Residence, Region, and Wealth

Table 14.4 indicates that generally urban residents have a significantly higher risk of HIV infection than rural residents. Much of that greater risk can be attributed to the fact that prevalence among the population of reproductive age is substantially higher in urban areas compared with rural areas. Prevalence among urban women age 15-49 is 37 percent compared with 29 percent for rural women in the same age group, translating to a 1.3 urban-rural risk ratio of HIV infection. For men age 15-49, the risk associated with urban residence is slightly greater than that observed among women. Twenty-six percent of urban men are HIV positive compared with 17 percent of rural men, representing an urbanrural risk ratio of 1.5 . Among older adults and children age 2-14, HIV prevalence is not significantly higher in urban than in rural areas.

| Table 14.4 HIV prevalence among the population age 2 years and older by residence, region, and wealth quintile |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage HIV positive among population age 2 and older who were tested by residence, region, and wealth quintile, according to age and sex, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  | 2-14 years $^{1}$ |  | 15-49 years ${ }^{1}$ |  | 50 years and older ${ }^{1}$ |  | Total |  |
| Background characteristic | Percentage HIV positive ${ }^{2}$ | Number | Percentage HIV positive ${ }^{2}$ | Number | Percentage HIV positive ${ }^{2}$ | Number | Percentage HIV positive ${ }^{2}$ | Number |
| WOMEN |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 4.2 | 300 | 36.8 | 1,171 | 12.5 | 80 | 29.3 | 1,551 |
| Rural | 3.7 | 1,541 | 29.1 | 3,254 | 11.5 | 509 | 20.0 | 5,303 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 4.1 | 472 | 33.8 | 1,193 | 11.2 | 148 | 24.2 | 1,814 |
| Manzini | 5.5 | 527 | 30.4 | 1,459 | 13.2 | 182 | 22.9 | 2,168 |
| Shiselweni | 1.9 | 463 | 29.1 | 917 | 7.7 | 164 | 18.7 | 1,544 |
| Lubombo | 3.1 | 378 | 31.0 | 855 | 16.2 | 95 | 22.0 | 1,328 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 1.0 | 267 | 31.6 | 711 | 13.8 | 153 | 22.0 | 1,130 |
| Second | 3.1 | 224 | 32.1 | 775 | 10.6 | 136 | 23.8 | 1,135 |
| Middle | 5.1 | 221 | 31.5 | 873 | 8.8 | 116 | 24.5 | 1,210 |
| Fourth | 6.3 | 214 | 31.8 | 991 | 12.4 | 116 | 26.0 | 1,321 |
| Highest | 4.3 | 192 | 29.4 | 1,075 | 12.5 | 67 | 24.9 | 1,333 |
| Total | 3.7 | 1,841 | 31.2 | 4,425 | 11.7 | 588 | 22.1 | 6,854 |
| MEN |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 3.7 | 234 | 25.5 | 1,071 | 18.5 | 75 | 21.4 | 1,379 |
| Rural | 4.0 | 1,512 | 17.3 | 2,699 | 17.7 | 329 | 12.9 | 4,541 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 3.6 | 443 | 23.1 | 1,002 | 20.7 | 117 | 17.4 | 1,562 |
| Manzini | 3.0 | 493 | 18.4 | 1,224 | 22.2 | 127 | 14.5 | 1,844 |
| Shiselweni | 5.4 | 452 | 16.0 | 767 | 9.5 | 85 | 11.9 | 1,304 |
| Lubombo | 3.8 | 359 | 20.9 | 776 | 15.6 | 76 | 15.5 | 1,211 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 5.0 | 232 | 19.8 | 561 | 12.3 | 125 | 15.0 | 918 |
| Second | 2.7 | 183 | 19.8 | 607 | 27.2 | 77 | 16.9 | 868 |
| Middle | 2.3 | 204 | 17.0 | 787 | 20.3 | 62 | 14.3 | 1,053 |
| Fourth | 3.3 | 184 | 21.1 | 856 | 22.6 | 74 | 18.3 | 1,114 |
| Highest | 3.0 | 151 | 20.4 | 959 | 9.9 | 67 | 17.6 | 1,177 |
| Total | 4.0 | 1,746 | 19.7 | 3,770 | 17.8 | 404 | 14.9 | 5,921 |
| TOTAL |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 4.0 | 534 | 31.4 | 2,242 | 15.4 | 155 | 25.6 | 2,930 |
| Rural | 3.8 | 3,053 | 23.8 | 5,953 | 14.0 | 838 | 16.8 | 9,844 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 3.9 | 915 | 28.9 | 2,195 | 15.4 | 265 | 21.0 | 3,375 |
| Manzini | 4.3 | 1,020 | 24.9 | 2,683 | 16.9 | 309 | 19.1 | 4,012 |
| Shiselweni | 3.6 | 915 | 23.1 | 1,685 | 8.3 | 248 | 15.6 | 2,848 |
| Lubombo | 3.5 | 737 | 26.2 | 1,632 | 15.9 | 171 | 18.9 | 2,539 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 2.8 | 499 | 26.4 | 1,272 | 13.1 | 277 | 18.9 | 2,048 |
| Second | 2.9 | 407 | 26.7 | 1,382 | 16.6 | 214 | 20.8 | 2,003 |
| Middle | 3.8 | 425 | 24.6 | 1,660 | 12.8 | 178 | 19.7 | 2,263 |
| Fourth | 4.9 | 398 | 26.8 | 1,847 | 16.3 | 190 | 22.4 | 2,435 |
| Highest | 3.7 | 343 | 25.1 | 2,033 | 11.2 | 134 | 21.5 | 2,510 |
| Total | 3.9 | 3,587 | 25.9 | 8,195 | 14.2 | 993 | 18.8 | 12,774 |
| ${ }^{1}$ For the population 12 and older, includes only de facto household members who were interviewed and tested. <br> ${ }^{2}$ HIV positive refers only to those infected with HIV-1. |  |  |  |  |  |  |  |  |

The HIV epidemic also exhibits some degree of regional heterogeneity, with the prevalence rate in the population age 2 and older ranging from 16 percent in Shiselweni to 21 percent in Hhohho. The regional differential is especially marked in the case of older adults; 8 percent of the population age 50 and older is HIV positive in Shiselweni compared with 15-17 percent in the other three regions.

Table 14.4 also shows that the proportion of HIV positive does not vary in a uniform manner with the wealth quintile.

### 14.2.3 HIV Prevalence by Education and Employment

Table 14.5 examines the relationship between HIV prevalence and education and employment for women and men age 15 years and above. Among women age 15-49, the HIV prevalence rate is lowest among those with a tertiary education ( 27 percent) and highest among those with a lower primary education (34 percent). Among men, the educational differentials are larger than among women. The HIV infection rate is highest among those with no education (31 percent) while men with higher primary and secondary education have the lowest infection rates (16 percent and 17 percent, respectively).

| Table 14.5 HIV prevalence by education and employment status: Women and men age 15 and older |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage HIV positive among population age 15 and older who were tested by selected education and employment status, according to age and sex, Swaziland 2006-07 |  |  |  |  |  |  |
|  | 15-49 years |  | 50 years and older |  | Total |  |
| Background characteristic | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| WOMEN |  |  |  |  |  |  |
| Education |  |  |  |  |  |  |
| No education | 29.6 | 1,347 | * | 0 | 29.6 | 1,347 |
| Lower primary | 33.8 | 785 | 8.5 | 136 | 30.1 | 921 |
| Higher primary | 33.3 | 795 | 12.4 | 135 | 30.2 | 930 |
| Secondary | 30.5 | 779 | 8.8 | 51 | 29.2 | 830 |
| High school | 30.1 | 511 | * | 8 | 29.6 | 519 |
| Tertiary | 26.8 | 177 | * | 15 | 25.8 | 192 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 26.2 | 2,361 | 10.8 | 390 | 24.0 | 2,752 |
| Employed | 38.1 | 1,919 | 13.4 | 190 | 35.9 | 2,110 |
| Missing | 20.0 | 143 | 10.0 | 7 | 19.5 | 151 |
| Total | 31.1 | 4,424 | 11.7 | 588 | 28.9 | 5,012 |
| MEN |  |  |  |  |  |  |
| Education |  |  |  |  |  |  |
| No education | 30.7 | 286 | * | 0 | 30.7 | 286 |
| Lower primary | 22.5 | 424 | 34.2 | 74 | 24.3 | 498 |
| Higher primary | 16.1 | 915 | 17.2 | 79 | 16.2 | 994 |
| Secondary | 17.1 | 1,097 | 14.2 | 51 | 17.0 | 1,148 |
| High school | 20.6 | 756 | 17.5 | 11 | 20.6 | 767 |
| Tertiary | 23.5 | 286 | 10.7 | 27 | 22.4 | 313 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 9.7 | 1,708 | 15.1 | 211 | 10.3 | 1,919 |
| Employed | 28.0 | 2,054 | 20.5 | 184 | 27.4 | 2,239 |
| Missing | * | 1 | * | 7 | * | 8 |
| Total | 19.7 | 3,763 | 17.9 | 402 | 19.5 | 4,165 |
|  |  |  |  |  |  | inued... |

Table 14.5-Continued

| Background characteristic | 15-49 years |  | 50 years and older |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| TOTAL |  |  |  |  |  |  |
| Education |  |  |  |  |  |  |
| No education | 29.8 | 1,632 | * | 0 | 29.8 | 1,632 |
| Lower primary | 29.9 | 1,209 | 17.6 | 211 | 28.0 | 1,419 |
| Higher primary | 24.1 | 1,710 | 14.2 | 214 | 23.0 | 1,924 |
| Secondary | 22.7 | 1,876 | 11.5 | 101 | 22.1 | 1,977 |
| High school | 24.4 | 1,267 | 10.2 | 19 | 24.2 | 1,286 |
| Tertiary | 24.8 | 463 | 11.5 | 42 | 23.7 | 504 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 19.3 | 4,069 | 12.3 | 601 | 18.4 | 4,670 |
| Employed | 32.9 | 3,973 | 16.9 | 375 | 31.5 | 4,348 |
| Missing | 19.8 | 144 | 23.0 | 14 | 20.1 | 159 |
| Total | 25.9 | 8,187 | 14.2 | 990 | 24.6 | 9,177 |

Note: Table is based on de facto household members who were interviewed and tested. Totals include 5 respondents for whom information on education level is missing ( 4 women and 1 man ). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ HIV positive refers only to those infected with HIV-1.

Among the population age 15-49, women and men who are employed have higher infection rates than their counterparts who are not employed ( 38 percent compared with 26 percent among women and 28 percent compared with 10 percent for men). Similarly, among older adults, employed women and men have higher infection rates than their unemployed counterparts.

### 14.2.4 HIV Prevalence by Sociodemographic Characteristics

Tables 14.6.1 through 14.6.3 present the relationship between HIV prevalence and a number of other sociodemographic variables for women, men, and the total population age 15 years and older, respectively. Looking at the patterns for women, marital status is strongly related to HIV prevalence. For example, women age 15-49 who are widowed or who are divorced or separated have significantly higher rates ( 56 percent and 51 percent, respectively) than those who are married or living together ( 33 percent). HIV rates are lowest for women in this age group who have never been in a union ( 26 percent). The patterns among older women are generally similar, with divorced, separated, and widowed women having higher HIV prevalence than other women. A sizeable proportion (5 percent) of women age 15 and older who said that they never had sex were HIV positive; this suggests that some women may have failed to report sexual activity or that there has been some degree of nonsexual transmission of HIV, e.g., through blood transfusion or unsterile injections.

Among currently married women, HIV infection does not vary much by type of union. Women who are in a polygynous union have the same prevalence rate as women who are not in a polygamous union. Somewhat surprisingly, women who are not in any form of union have an equally high prevalence rate. The highest prevalence is found among women who are uncertain if their husband (partner) has another wife (partner).

Table 14.6.1 HIV prevalence by demographic characteristics: Women age 15 and older
Percentage HIV positive among women age 15 and older who were tested, by demographic characteristics, Swaziland 2006-07

| Demographic characteristic | 15-49 years |  | 50 years and older |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| Marital status |  |  |  |  |  |  |
| Never married | 25.9 | 2,213 | (8.7) | 33 | 25.6 | 2,247 |
| Ever had sex | 37.1 | 1,433 | (9.1) | 32 | 36.5 | 1,465 |
| Never had sex | 5.2 | 780 | * | 1 | 5.2 | 781 |
| Married/living together | 32.5 | 1,811 | 8.1 | 236 | 29.7 | 2,047 |
| Divorced or separated | 51.3 | 146 | (22.6) | 28 | 46.7 | 174 |
| Widowed | 55.7 | 254 | 13.9 | 291 | 33.4 | 545 |
| Type of union |  |  |  |  |  |  |
| In polygynous union | 30.9 | 340 | 5.1 | 17 | 29.7 | 357 |
| Not in polygynous union | 31.1 | 1,193 | 15.2 | 93 | 29.9 | 1,286 |
| Not currently in union | 30.2 | 2,613 | 11.2 | 473 | 27.3 | 3,085 |
| Don't know/missing | 40.6 | 277 | * | 6 | 40.1 | 283 |
| Times slept away from home in past 12 months |  |  |  |  |  |  |
| None | 29.2 | 1,231 | 10.4 | 208 | 26.5 | 1,439 |
| 1-2 | 25.4 | 713 | 16.6 | 93 | 24.3 | 806 |
| 3-4 | 31.3 | 503 | 14.8 | 72 | 29.2 | 575 |
| $5+$ | 34.3 | 1,962 | 9.9 | 210 | 32.0 | 2,172 |
| Missing | (27.6) | 41 | * | 9 | (27.6) | 51 |
| Time away in past 12 months |  |  |  |  |  |  |
| Away for more than one month | 38.5 | 628 | 15.4 | 91 | 35.6 | 718 |
| Away for less than one month | 30.3 | 2,549 | 11.6 | 285 | 28.4 | 2,834 |
| Not away | 29.3 | 1,236 | 10.4 | 208 | 26.6 | 1,445 |
| Missing | (17.4) | 36 | * | 6 | (17.3) | 42 |
| Currently pregnant |  |  |  |  |  |  |
| Pregnant | 37.7 | 241 | - | - | - | - |
| Not pregnant or not sure | 30.8 | 4,183 | - | - | - | - |
| ANC for last birth in the past 3 years |  |  |  |  |  |  |
| ANC provided by the public sector | 38.7 | 994 | - | - | - | - |
| ANC provided by other than the public sector | 34.5 | 380 | - | - | - | - |
| No ANC/no birth in past 3 years | 28.3 | 3,049 | - | - | - | - |
| Total | 31.1 | 4,424 | 11.7 | 588 | 28.9 | 5,012 |

Note: Table is based on de facto household members who were interviewed and tested. Total for women includes 2 respondents for whom information on receipt of ANC for last birth is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ HIV positive refers only to those infected with HIV-1.

In the 2006-07 SDHS respondents were asked whether they spent any time in the past 12 months away from home, and in the same time period, whether they were away from home for more than one month. The survey results show that, in general, women who sleep away from home more frequently have higher prevalence rates than women who stay at home. For example, women age 15-49 who slept away from home five or more times have a prevalence rate of 34 percent compared with 25 percent for women who slept away from home only once or twice. Similarly, women who were away for more than one month have a higher prevalence rate than women who were never away.

HIV prevalence among women who were pregnant at the time of the SDHS interview was 38 percent. The prevalence rate among women who received antenatal care (ANC) at a public sector provider prior to a live birth in the three-year period before the survey was 39 percent. Both these figures
compare fairly well with results from the 2006 Sentinel Surveillance, which obtained a rate of 39 percent among pregnant women attending antenatal care at public facilities.

The relationships between HIV prevalence and the various sociodemographic characteristics among men are generally similar to the patterns observed among women (Table 14.6.2). Men who are widowed or divorced or separated have the highest HIV prevalence levels. Around 2 percent of nevermarried men who say they never had sex also are infected, which may be a result of misreporting of sexual activity or due to nonsexual transmission of HIV. Considering the type of current union, around one in two men who were in polygynous unions was infected with HIV.

Table 14.6.2 HIV prevalence by demographic characteristics: Men age 15 and older
Percentage HIV positive among men age 15 and older who were tested, by demographic characteristics, Swaziland 2006-07

| Demographic characteristic | 15-49 years |  | 50 years and older |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| Marital status |  |  |  |  |  |  |
| Never married | 9.9 | 2,520 | * | 6 | 10.0 | 2,526 |
| Ever had sex | 16.9 | 1,329 | * | 6 | 17.0 | 1,335 |
| Never had sex | 2.1 | 1,191 | * | 0 | 2.1 | 1,191 |
| Married/living together | 36.3 | 1,059 | 16.0 | 318 | 31.6 | 1,377 |
| Divorced or separated | 54.5 | 132 | (18.6) | 27 | 48.5 | 159 |
| Widowed | 67.5 | 52 | (26.8) | 52 | 47.1 | 104 |
| Type of union |  |  |  |  |  |  |
| In polygynous union | 50.0 | 54 | 32.4 | 13 | 46.6 | 66 |
| Not in polygynous union | 35.6 | 999 | 23.5 | 64 | 34.8 | 1,063 |
| Not currently in union | 13.2 | 2,704 | 16.1 | 317 | 13.5 | 3,021 |
| Don't know/missing | * | 7 | * | 8 | * | 14 |
| Times slept away from home in past 12 months |  |  |  |  |  |  |
| None | 15.9 | 1,351 | 15.6 | 136 | 15.8 | 1,487 |
| 1-2 | 14.4 | 477 | 18.9 | 60 | 14.9 | 537 |
| 3-4 | 18.3 | 403 | 14.3 | 43 | 17.9 | 445 |
| 5+ | 25.2 | 1,505 | 19.6 | 158 | 24.7 | 1,664 |
| Missing | (17.7) | 27 | * | 5 | (22.9) | 32 |
| Time away in past 12 months |  |  |  |  |  |  |
| Away for more than one month | 24.4 | 585 | 21.9 | 70 | 24.1 | 655 |
| Away for less than one month | 21.0 | 1,797 | 17.8 | 194 | 20.7 | 1,991 |
| Not away | 15.9 | 1,356 | 15.6 | 136 | 15.9 | 1,493 |
| Missing | (18.5) | 25 | * | 2 | * | 27 |
| Male circumcision |  |  |  |  |  |  |
| Circumcised | 21.8 | 306 | - | - | - | - |
| Not circumcised | 19.5 | 3,457 | - | - | - | - |
| Total | 19.7 | 3,763 | 17.9 | 402 | 19.5 | 4,165 |

[^20]As expected, men who sleep away from home more frequently have higher infection rates; 25 percent of men age 15-49 who slept away from home five or more times in the 12 months preceding the survey were infected compared with 16 percent who did not sleep away from home. Similarly, men who are away from home for comparatively long periods of time (always more than one month) have a somewhat greater risk of HIV infection than those who are never away and those who are away for less than one month at a time.

| Table 14.6.3 HIV prevalence by demographic characteristics: Women and men age 15 and older |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage HIV positive among women and men age 15 and older who were tested, by demographic characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
|  | 15-49 years |  | 50 years and older |  | Total |  |
| Demographic characteristic | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| Marital status |  |  |  |  |  |  |
| Never married | 17.4 | 4,733 | (13.5) | 39 | 17.3 | 4,772 |
| Ever had sex | 27.4 | 2,762 | (13.9) | 38 | 27.2 | 2,800 |
| Never had sex | 3.3 | 1,971 | * | 1 | 3.3 | 1,972 |
| Married/living together | 33.9 | 2,870 | 12.6 | 554 | 30.5 | 3,423 |
| Divorced or separated | 52.9 | 278 | 20.7 | 55 | 47.5 | 333 |
| Widowed | 57.7 | 306 | 15.8 | 343 | 35.6 | 648 |
| Type of union |  |  |  |  |  |  |
| In polygynous union | 33.5 | 394 | (17.0) | 30 | 32.3 | 423 |
| Not in polygynous union | 33.1 | 2,192 | 18.6 | 157 | 32.2 | 2,349 |
| Not currently in union | 21.5 | 5,317 | 13.1 | 790 | 20.5 | 6,107 |
| Don't know/missing | 40.7 | 284 | * | 14 | 39.7 | 298 |
| Times slept away from home in past 12 months |  |  |  |  |  |  |
| None | 22.2 | 2,582 | 12.4 | 345 | 21.1 | 2,927 |
| 1-2 | 21.0 | 1,190 | 17.5 | 153 | 20.6 | 1,343 |
| 3-4 | 25.5 | 906 | 14.6 | 115 | 24.3 | 1,021 |
| 5+ | 30.4 | 3,467 | 14.1 | 369 | 28.8 | 3,836 |
| Missing | (27.6) | 41 | * | 9 | (27.6) | 51 |
| Time away in past 12 months |  |  |  |  |  |  |
| Away for more than one month | 31.7 | 1,213 | 18.2 | 161 | 30.1 | 1,374 |
| Away for less than one month | 26.5 | 4,346 | 14.1 | 479 | 25.2 | 4,825 |
| Not away | 22.3 | 2,592 | 12.4 | 345 | 21.1 | 2,937 |
| Missing | (17.4) | 36 | * | 6 | (17.3) | 42 |
| Total | 25.9 | 8,187 | 14.2 | 990 | 24.6 | 9,177 |
| Note: Table is based on de facto household members who were interviewed and tested. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ HIV positive refers only to those infected with HIV-1. |  |  |  |  |  |  |

### 14.2.5 HIV Prevalence by Sexual Behaviour Indicators

Tables 14.7.1 through 14.7.3 examine the variation in prevalence of HIV infection by sexual behaviour indicators among the ever sexually active population age 15 years and older. In reviewing the results, it is important to remember that responses about sexual risk behaviour may be subject to reporting bias. Also, sexual behaviour in the past 12 months preceding the survey may not adequately reflect lifetime sexual risk.

| Table 14.7.1 HIV prevalence by sexual behaviour: Women age 15 and older |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage HIV positive among ever sexually active women age 15 and older who were tested for HIV, by sexual behaviour characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
|  | 15-49 years |  | 50 years and older |  | Total |  |
| Sexual behaviour characteristic | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| Age at first sexual intercourse |  |  |  |  |  |  |
| <16 | 37.4 | 907 | 15.5 | 137 | 34.5 | 1,044 |
| 16-17 | 35.8 | 1,131 | 10.3 | 138 | 33.0 | 1,269 |
| 18-19 | 37.6 | 814 | 7.5 | 112 | 33.9 | 926 |
| 20+ | 32.2 | 483 | 12.7 | 196 | 26.6 | 679 |
| Missing | 42.3 | 305 | * | 1 | 42.2 | 306 |
| Higher-risk intercourse in past 12 months ${ }^{2}$ |  |  |  |  |  |  |
| Had higher-risk intercourse | 42.1 | 1,365 | (29.8) | 17 | 42.0 | 1,383 |
| Had sexual intercourse, not higher risk | 31.6 | 1,696 | 9.0 | 141 | 29.8 | 1,837 |
| No sexual intercourse in past 12 months | 38.8 | 578 | 11.9 | 426 | 27.4 | 1,004 |
| Number of sexual partners in past 12 months |  |  |  |  |  |  |
| 0 | 38.8 | 577 | 11.8 | 424 | 27.3 | 1,001 |
| 1 | 35.8 | 2,989 | 11.4 | 156 | 34.6 | 3,145 |
| 2 | 52.3 | 68 | * | 1 | 51.4 | 69 |
| $3+$ | * | 4 | * | 1 | * | 5 |
| Missing | * | 1 | * | 2 | * | 4 |
| Number of higher-risk partners in past 12 months $^{3}$ |  |  |  |  |  |  |
| 0 | 33.4 | 2,274 | 11.2 | 567 | 29.0 | 2,842 |
| 1 | 41.8 | 1,305 | 29.8 | 17 | 41.7 | 1,322 |
| 2 | 47.6 | 58 | na | na | na | na |
| $3+$ | 64.5 | 2 | na | na | na | na |
| Condom use |  |  |  |  |  |  |
| Ever used a condom | 42.7 | 1,999 | na | na | na | na |
| Never used a condom | 29.4 | 1,632 | na | na | na | na |
| Missing | * | 8 | na | na | na | na |
| Condom use at last sexual intercourse in past 12 months |  |  |  |  |  |  |
| Used condom | 44.4 | 1,118 | (22.4) | 25 | 43.9 | 1,143 |
| Did not use condom | 31.6 | 1,941 | 9.1 | 133 | 30.2 | 2,075 |
| No sexual intercourse in past |  |  |  |  |  |  |
| 12 months | 38.8 | 578 | 11.9 | 426 | 27.4 | 1,004 |
| Missing | * | 2 | * | 0 | * | 2 |
| Condom use at last higher-risk intercourse in past 12 months ${ }^{2}$ |  |  |  |  |  |  |
| Used condom | 44.9 | 730 | * | 4 | 44.8 | 734 |
| Did not use condom | 39.0 | 635 | * | 13 | 38.8 | 648 |
| No higher-risk intercourse/no intercourse past 12 months | 33.4 | 2,274 | 11.2 | 567 | 29.0 | 2,842 |
| Number of lifetime partners |  |  |  |  |  |  |
| 1 | 22.9 | 1,249 | 7.5 | 234 | 20.5 | 1,483 |
| 2 | 38.3 | 1,062 | 10.7 | 195 | 34.0 | 1,257 |
| 3-4 | 46.9 | 938 | 15.5 | 104 | 43.8 | 1,042 |
| 5-9 | 53.9 | 236 | (30.7) | 33 | 51.0 | 268 |
| 10+ | 57.9 | 44 | * | 8 | 51.9 | 52 |
| Missing | 44.7 | 111 | * | 11 | 42.8 | 122 |
| Total | 36.7 | 3,640 | 11.7 | 584 | 33.2 | 4,224 |
| Note: Table is based on de facto household members who were interviewed and tested. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. <br> na $=$ Not applicable <br> ${ }^{1}$ HIV positive refers only to individuals infected with HIV-1. <br> ${ }^{2}$ Sexual intercourse with a partner who was neither a spouse nor lived with the respondent. For respondents age 1549, refers to any of three most recent partners in the 12-month period before the survey. For respondents age 15-49, refers to last partner in the 12-month period before the survey. <br> ${ }^{3}$ A partner who was neither a spouse nor lived with the respondent. For respondents age 15-49, refers to any of three most recent partners in the 12-month period before the survey. For respondents age 15-49, refers to last partner in the 12-month period before the survey. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |


| Percentage HIV positive among ever sexually active men age 15 and older who were tested for HIV, by sexual behaviour characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15-49 years |  | 50 years and older |  | Total |  |
| Sexual behaviour characteristic | $\begin{gathered} \hline \text { Percentage } \\ \text { HIV } \\ \text { positive } \end{gathered}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| Age at first sexual intercourse |  |  |  |  |  |  |
| <16 | 18.8 | 380 | * | 20 | 18.7 | 400 |
| 16-17 | 31.7 | 627 | (14.7) | 37 | 30.7 | 664 |
| 18-19 | 24.4 | 712 | 22.9 | 76 | 24.2 | 788 |
| 20+ | 32.2 | 835 | 17.0 | 261 | 28.6 | 1,096 |
| Missing | (21.6) | 18 | * | 0 | (21.6) | 18 |
| Higher-risk intercourse in past 12 months ${ }^{2}$ |  |  |  |  |  |  |
| Had higher-risk intercourse | 26.9 | 1,307 | (30.3) | 33 | 26.9 | 1,340 |
| Had sexual intercourse, not higher risk | 34.2 | 911 | 14.5 | 260 | 29.8 | 1,172 |
| No sexual intercourse in past 12 months | 15.2 | 353 | 22.7 | 101 | 16.8 | 453 |
| Number of sexual partners in past 12 months |  |  |  |  |  |  |
| 0 | 14.9 | 345 | 22.7 | 101 | 16.6 | 446 |
| 1 | 28.0 | 1,707 | 14.6 | 259 | 26.2 | 1,966 |
| 2 | 35.9 | 456 | * | 23 | 35.6 | 479 |
| $3+$ | 38.0 | 50 | * | 11 | 36.7 | 61 |
| Missing | (34.4) | 12 | * | 1 | * | 13 |
| Number of higher-risk partners in past 12 months |  |  |  |  |  |  |
| 0 | 28.9 | 1,264 | 16.8 | 361 | 26.2 | 1,625 |
| 1 | 26.4 | 976 | (30.3) | 33 | 26.5 | 1,009 |
| 2 | 27.1 | 292 | na | na | 27.1 | 292 |
| $3+$ | (36.2) | 39 | na | na | 36.2 | 39 |
| Condom use |  |  |  |  |  |  |
| Ever used a condom | 30.7 | 2,020 | na | na | na | na |
| Never used a condom | 17.6 | 550 | na | na | na | na |
| Missing | * | 1 | na | na | na | na |
| Condom use at last sexual intercourse in past 12 months |  |  |  |  |  |  |
| Used condom | 28.3 | 1,047 | (31.9) | 44 | 28.5 | 1,091 |
| Did not use condom | 31.3 | 1,171 | 13.5 | 249 | 28.1 | 1,420 |
| No sexual intercourse in past 12 months | 15.2 | 353 | 22.7 | 101 | 16.8 | 453 |
| Condom use at last higher-risk <br> intercourse in past 12 months ${ }^{2}$ |  |  |  |  |  |  |
| Used condom | 25.0 | 857 | * | 12 | 25.2 | 869 |
| Did not use condom | 30.4 | 450 | * | 21 | 30.2 | 471 |
| No higher-risk intercourse/no intercourse past 12 months | 28.9 | 1,264 | 16.8 | 361 | 26.2 | 1,625 |
| Number of lifetime partners |  |  |  |  |  |  |
| 1 | 6.2 | 322 | * | 12 | 6.2 | 334 |
| 2 | 14.7 | 319 | (9.6) | 35 | 14.2 | 354 |
| 3-4 | 28.2 | 637 | 25.4 | 64 | 28.0 | 701 |
| 5-9 | 30.7 | 656 | 18.3 | 108 | 29.0 | 764 |
| 10+ | 45.9 | 478 | 17.9 | 118 | 40.3 | 596 |
| Missing | 30.9 | 159 | 16.0 | 57 | 27.0 | 215 |
| Total | 27.9 | 2,571 | 17.9 | 394 | 26.5 | 2,965 |
| Note: Table is based on de facto household members who were interviewed and tested. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. <br> na $=$ Not applicable <br> ${ }^{1}$ HIV positive refers only to individuals infected with HIV-1. <br> ${ }^{2}$ Sexual intercourse with a partner who was neither a spouse nor lived with the respondent. For respondents age 15-49, refers to any of three most recent partners in the 12-month period before the survey. For respondents age 15-49, refers to last partner in the 12-month period before the survey. <br> ${ }^{3}$ A partner who was neither a spouse nor lived with the respondent. For respondents age 15-49, refers to any of three most recent partners in the 12-month period before the survey. For respondents age 15-49, refers to last partner in the 12-month period before the survey. |  |  |  |  |  |  |

For women, there is a clear pattern of higher HIV prevalence with earlier sexual debut. Women age 15-49 years who started having sex at an early age (before age 16) have higher HIV prevalence than those with a later sexual debut ( 37 percent compared with 32 percent). A similar pattern is also noted for women age 50 years and above ( 16 percent compared with 13 percent). This pattern is not evident among men.

Having a higher-risk sexual partner (non-marital, non-cohabiting partner) in the 12 months preceding the survey increases the risk of infection. Forty-two percent of women age 15-49 years who had higher-risk sex are infected with HIV compared with 32 percent of women who are sexually active but did not have a higher-risk partner. In contrast, men age 15-49 years reporting a higher-risk partner in the past year have a slightly lower HIV prevalence than sexually active men who did not have a higher- risk partner ( 27 percent and 34 percent, respectively).

Condoms, when used properly, are an effective way of preventing the transmission of HIV and other STIs. Although this would suggest that HIV rates should be lower among condom users, there are a number of factors that may influence the direction of the relationship. For example, condom use rates may be higher among individuals who are infected because they are seeking to protect an uninfected partner. Also, reported condom use cannot be assumed to be "correct condom use." Thus, it is not surprising that the association between condom use and infection levels is not uniform. Infection rates among men who used condoms at the last sexual encounter and at last higher-risk intercourse in the year before the survey are slightly lower compared with the infection rates for men who were also in the same situation but failed to use condoms. Among women, the opposite pattern is observed: condom use in the past year is associated with markedly higher levels of HIV infection.

The risk of contracting HIV is assumed to increase with the number of lifetime partners that an individual has. The SDHS results support this assumption. The HIV infection rate increases from 23 percent among women age 15-49 who have had only one partner to 58 percent among women who report having had ten or more sexual partners. Similarly, the HIV rate among men age 15-49 rises sharply with the number of partners, from 6 percent among men with one partner to 46 percent among men having ten or more partners.

| Table 14.7.3 HIV prevalence by sexual behaviour: Women and men age 15 and older |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage HIV positive among ever sexually active women and men age 15 and older who were tested for HIV, by sexual behaviour characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
|  | 15-49 years |  | 50 years and older |  | Total |  |
| Sexual behaviour characteristic | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive | Number |
| Age at first sexual intercourse |  |  |  |  |  |  |
| <16 | 31.9 | 1,287 | 15.7 | 157 | 30.2 | 1,444 |
| 16-17 | 34.4 | 1,758 | 11.2 | 176 | 32.3 | 1,933 |
| 18-19 | 31.4 | 1,526 | 13.7 | 188 | 29.5 | 1,713 |
| 20+ | 32.2 | 1,318 | 15.1 | 458 | 27.8 | 1,775 |
| Missing | 41.2 | 323 | * | 1 | 41.1 | 324 |
| Higher-risk intercourse in past 12 months ${ }^{2}$ |  |  |  |  |  |  |
| Had higher-risk intercourse | 34.7 | 2,672 | (30.1) | 50 | 34.6 | 2,723 |
| Had sexual intercourse, not higher risk | 32.5 | 2,607 | 12.6 | 402 | 29.8 | 3,009 |
| No sexual intercourse in past 12 months | 29.9 | 931 | 14.0 | 526 | 24.1 | 1,458 |
| Number of sexual partners in past |  |  |  |  |  |  |
| 0 | 29.8 | 922 | 13.9 | 525 | 24.0 | 1,447 |
| 1 | 33.0 | 4,696 | 13.4 | 415 | 31.4 | 5,111 |
| 2 | 38.0 | 524 | * | 24 | 37.6 | 548 |
| $3+$ | 41.4 | 55 | * | 11 | 39.2 | 66 |
| Missing | (36.6) | 13 | * | 3 | * | 17 |
| Number of higher-risk partners in past 12 months $^{3}$ |  |  |  |  |  |  |
| 0 | 31.8 | 3,538 | 13.4 | 928 | 28.0 | 4,467 |
| 1 | 35.2 | 2,281 | (30.1) | 50 | 35.1 | 2,331 |
| 2 | 30.5 | 350 | na | na | na | na |
| $3+$ | 37.9 | 41 | na | na | na | na |
| Condom use |  |  |  |  |  |  |
| Ever used a condom | 36.7 | 4,019 | na | na | na | na |
| Never used a condom | 26.4 | 2,182 | na | na | na | na |
| Missing | 6.4 | 10 | na | na | na | na |
| Condom use at last sexual intercourse in past 12 months |  |  |  |  |  |  |
| Used condom | 36.6 | 2,165 | 28.5 | 69 | 36.4 | 2,234 |
| Did not use condom | 31.5 | 3,113 | 12.0 | 383 | 29.4 | 3,495 |
| No sexual intercourse in past |  |  |  |  |  |  |
| 12 months | 29.9 | 931 | 14.0 | 526 | 24.1 | 1,458 |
| Missing | * | 2 | * | 0 | * | 2 |
| Condom use at last higher-risk intercourse in past 12 months ${ }^{2}$ |  |  |  |  |  |  |
| Used condom | 34.1 | 1,587 | ${ }^{*}$ | 16 | 34.1 | 1,603 |
| Did not use condom | 35.4 | 1,086 | (28.1) | 34 | 35.2 | 1,119 |
| No higher-risk intercourse/ no intercourse past 12 months | 31.8 | 3,538 | 13.4 | 928 | 28.0 | 4,467 |
| Number of lifetime partners |  |  |  |  |  |  |
| 1 | 19.5 | 1,571 | 7.5 | 246 | 17.9 | 1,817 |
| 2 | 32.8 | 1,382 | 10.5 | 229 | 29.7 | 1,611 |
| 3-4 | 39.3 | 1,575 | 19.3 | 168 | 37.4 | 1,743 |
| 5-9 | 36.8 | 892 | 21.2 | 141 | 34.7 | 1,033 |
| 10+ | 46.9 | 522 | 18.1 | 127 | 41.3 | 648 |
| Missing | 36.6 | 270 | 17.1 | 67 | 32.7 | 337 |
| Total | 33.0 | 6,211 | 14.2 | 978 | 30.5 | 7,189 |
| Note: Table is based on de facto household members who were interviewed and tested. Totals include 2 male respondents for whom information on number of sexual partners in the past 12 months is missing and 4 female respondents for whom information on condom use is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. <br> na $=$ Not applicable <br> ${ }^{1}$ HIV positive refers only to individuals infected with HIV-1. <br> ${ }^{2}$ Sexual intercourse with a partner who was neither a spouse nor lived with the respondent. For respondents age 15-49, refers to any of three most recent partners in the 12-month period before the survey. For respondents age 15-49, refers to last partner in the 12-month period before the survey. <br> ${ }^{3}$ A partner who was neither a spouse nor lived with the respondent. For respondents age 15-49, refers to any of three most recent partners in the 12-month period before the survey. For respondents age 15-49, refers to last partner in the 12 -month period before the survey. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

### 14.3 HIV Prevalence by Other Characteristics Related to HiV Risk

Table 14.8 presents the variation in HIV prevalence with a number of other characteristics related to HIV risk among men and women age 15 years and older who ever had sex. As expected, women and men with a history of a sexually transmitted infection (STI) or STI symptoms have higher rates of HIV infection than those with none. For example, among women age 15-49, 54 percent who report having an STI or STI symptoms are HIV positive, compared with 34 percent of women who did not have an STI or STI symptoms.

| Table 14.8 HIV prevalence by other characteristics related to HIV risk: Women and men age 15 and older |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage HIV positive among ever sexually active women and men age 15 and older who were tested for HIV, by whether had an STI in the past 12 months and by prior testing for HIV, Swaziland 2006-07 |  |  |  |  |  |  |
|  | 15-49 years |  | 50 years and older |  | Total |  |
| Characteristic | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| WOMEN |  |  |  |  |  |  |
| Sexually transmitted infection in past 12 months |  |  |  |  |  |  |
| Had STI or STI symptoms | 53.6 | 439 | * | 10 | 52.8 | 449 |
| No STI, no symptoms | 33.5 | 2,593 | 11.3 | 123 | 32.5 | 2,717 |
| Don't know/missing | 37.9 | 608 | 11.7 | 451 | 26.8 | 1,058 |
| Prior HIV testing |  |  |  |  |  |  |
| Ever tested | 39.8 | 1,735 | 24.1 | 106 | 38.9 | 1,841 |
| Received results | 39.4 | 1,556 | 20.4 | 93 | 38.4 | 1,649 |
| Did not receive results | 42.6 | 179 | * | 13 | 43.1 | 192 |
| Never tested | 33.6 | 1,884 | 8.9 | 458 | 28.8 | 2,343 |
| Missing | * | 20 | * | 20 | (33.5) | 40 |
| Total | 36.7 | 3,640 | 11.7 | 584 | 33.2 | 4,224 |
| MEN |  |  |  |  |  |  |
| Sexually transmitted infection in past 12 months |  |  |  |  |  |  |
| Had STI or STI symptoms | 48.4 | 314 | * | 11 | 48.5 | 325 |
| No STI, no symptoms | 27.0 | 1,882 | 15.6 | 250 | 25.7 | 2,132 |
| Don't know/missing | 15.0 | 375 | 19.5 | 133 | 16.2 | 509 |
| Prior HIV testing |  |  |  |  |  |  |
| Ever tested | 38.2 | 625 | 33.1 | 80 | 37.7 | 705 |
| Received results | 37.0 | 575 | 27.1 | 66 | 36.0 | 641 |
| Did not receive results | 52.0 | 50 | * | 14 | 54.2 | 64 |
| Never tested | 24.5 | 1,937 | 14.2 | 304 | 23.1 | 2,241 |
| Missing | * | 9 | * | 10 | * | 19 |
| Total | 27.9 | 2,571 | 17.9 | 394 | 26.5 | 2,965 |
| TOTAL |  |  |  |  |  |  |
| Sexually transmitted infection in past 12 months |  |  |  |  |  |  |
| Had STI or STI symptoms | 51.4 | 752 | * | 21 | 51.0 | 774 |
| No STI, no symptoms | 30.8 | 4,476 | 14.2 | 373 | 29.5 | 4,848 |
| Don't know/missing | 29.2 | 983 | 13.5 | 584 | 23.4 | 1,567 |
| Prior HIV testing |  |  |  |  |  |  |
| Ever tested | 39.4 | 2,360 | 28.0 | 186 | 38.5 | 2,546 |
| Received results | 38.8 | 2,131 | 23.2 | 159 | 37.7 | 2,290 |
| Did not receive results | 44.6 | 229 | (56.8) | 26 | 45.9 | 256 |
| Never tested | 29.0 | 3,821 | 11.1 | 763 | 26.0 | 4,584 |
| Missing | (50.0) | 29 | (10.0) | 30 | 29.8 | 60 |
| Total | 33.0 | 6,211 | 14.2 | 978 | 30.5 | 7,189 |
| Note: Table is based on de facto household members who were interviewed and tested. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ HIV positive refers only to those infected with HIV-1. |  |  |  |  |  |  |

The uptake of HIV testing in Swaziland remains well below 40 percent in the adult population (see Chapter 13). As might be expected from this finding, women and men who have been tested for HIV have higher rates of HIV infection than those who have never been tested. For example, 38 percent of men who have been tested for HIV are positive, compared with 25 percent of men who have never been tested.

Table 14.9 provides further information on the relationship between prior HIV testing and the HIV status of women and men in Swaziland. The results suggest that the majority ( 61 percent) of individuals who are HIV positive are not aware of their status. Among those infected with the virus, women are much more likely to have been tested previously than are men ( 56 percent and 71 percent, respectively).

| Table 14.9 Prior HIV testing by current HIV status |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of women and men age $15-49$ by HIV testing status prior to the survey, according to whether HIV positive or negative, Swaziland 2006 |  |  |  |  |  |  |
|  | 15-49 | years | 50 years | nd older |  |  |
| HIV testing prior to the survey | HIV positive ${ }^{1}$ | HIV negative | HIV positive ${ }^{1}$ | HIV negative | HIV positive ${ }^{1}$ | HIV negative |
| WOMEN |  |  |  |  |  |  |
| Previously tested, received result of last test | 44.0 | 31.9 | 27.7 | 14.2 | 43.2 | 29.3 |
| Previously tested, did not receive result of last test | 6.6 | 4.0 | 9.5 | 1.3 | 6.7 | 3.6 |
| Not previously tested | 48.6 | 63.8 | 59.8 | 80.9 | 49.1 | 66.3 |
| Missing | 0.8 | 0.3 | 3.0 | 3.5 | 0.9 | 0.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 1,378 | 3,046 | 69 | 520 | 1,446 | 3,565 |
| MEN |  |  |  |  |  |  |
| Previously tested, received result of $\begin{array}{lllllll}\text { last test } & 28.8 & 13.2 & 24.8 & 14.6 & 28.5 & 13.3\end{array}$ |  |  |  |  |  |  |
| Previously tested, did not receive result of last test <br> 3.5 <br> 1.1 <br> 11.8 <br> 1.6 <br> 4.2 <br> 1.1 |  |  |  |  |  |  |
| Not previously tested | 67.2 | 85.0 | 62.1 | 81.1 | 66.8 | 84.6 |
| Missing | 0.4 | 0.8 | 1.3 | 2.8 | 0.5 | 1.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 741 | 3,022 | 72 | 330 | 813 | 3,352 |
| TOTAL |  |  |  |  |  |  |
| Previously tested, received result of last test <br> 38.7 <br> 22.6 <br> 26.2 <br> 14.4 <br> 37.9 <br> 21.6 |  |  |  |  |  |  |
| Previously tested, did not receive result of last test | 5.5 | 2.6 | 10.7 | 1.4 | 5.8 | 2.4 |
| Not previously tested | 55.1 | 74.3 | 61.0 | 81.0 | 55.5 | 75.2 |
| Missing | 0.7 | 0.5 | 2.2 | 3.2 | 0.8 | 0.9 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 2,119 | 6,068 | 141 | 850 | 2,260 | 6,917 |
| ${ }^{1}$ HIV positive refers only to individuals infected with HIV-1. |  |  |  |  |  |  |

### 14.4 HIV Prevalence and Male Circumcision

As discussed in Chapter 12, male circumcision is considered to have a protective effect for HIV infection, in part because of physiological differences that increase the susceptibility to HIV infection among uncircumcised men. As Table 14.10 shows, the relationship between HIV prevalence and circumcision status is not in the expected direction. Circumcised men have a slightly higher HIV infection rate than men who are not circumcised ( 22 percent compared with 20 percent). It is worth noting that the relationship between male circumcision and HIV infection may be confounded by the fact that the circumcision may not involve the full removal of the foreskin, which provides partial protection. As is the case with other findings, additional analysis is needed to determine if this lack of a relationship between male circumcision and HIV infection is a result of confounding factors or represents the true situation.

### 14.5 HIV Prevalence among Youth

Young people living with HIV are more likely to have been more recently infected compared with adults. Consequently, statistics on variation of HIV prevalence among youth are critical in understanding the patterns of recent HIV infections.

Table 14.11 presents HIV prevalence among youth by several demographic and socioeconomic characteristics. Overall, 14 percent of youth are infected with HIV. Prevalence of HIV is nearly four times higher among young women than among young men ( 23 percent compared with 6 percent).

HIV rates are higher among married or cohabiting youth than among unmarried youth. As expected, young pregnant women have a higher infection rate than young non-pregnant women (35 percent compared with 22 percent). HIV prevalence among youth living in urban areas is slightly higher than that of rural areas (18 percent compared with 13 percent). Youth in the Hhohho region have the highest HIV prevalence compared with those from other regions.

The prevalence of HIV among the small numbers of youth with no education is more than five times higher than that of youth with more than secondary education ( 32 percent compared with 6 percent). Among young women with no education, one in two is infected, while 13 percent of young men with no education are infected.

| Table 14.10 HIV prevalence by male circumcision |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Among men age 15-49 who were tested for HIV, the percentage HIV positive by whether circumcised or not, according to background characteristics, Swaziland 2006-07 |  |  |  |  |
|  | Circumcised |  | Not circumcised |  |
| Background characteristic | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| Age |  |  |  |  |
| 15-19 | (0.0) | 53 | 2.0 | 1,218 |
| 20-24 | (8.8) | 53 | 12.6 | 727 |
| 25-29 | (26.2) | 46 | 27.9 | 507 |
| 30-34 | (26.5) | 39 | 45.7 | 341 |
| 35-39 | 45.3 | 61 | 44.8 | 260 |
| 40-44 | (22.8) | 29 | 43.2 | 201 |
| 45-49 | (22.4) | 26 | 28.5 | 203 |
| Residence |  |  |  |  |
| Urban | 24.5 | 140 | 25.7 | 930 |
| Rural | 19.6 | 165 | 17.2 | 2,527 |
| Region |  |  |  |  |
| Hhohho | 23.2 | 92 | 23.1 | 909 |
| Manzini | 21.7 | 113 | 18.1 | 1,110 |
| Shiselweni | (15.2) | 51 | 16.2 | 712 |
| Lubombo | (26.3) | 50 | 20.6 | 726 |
| Education |  |  |  |  |
| No education | (30.9) | 29 | 31.1 | 256 |
| Primary | 18.2 | 97 | 18.1 | 1,240 |
| Secondary | 25.4 | 139 | 18.1 | 1,718 |
| More than secondary | (12.3) | 41 | 25.0 | 243 |
| Wealth quintile |  |  |  |  |
| Lowest | (20.3) | 32 | 19.8 | 529 |
| Second | (23.1) | 39 | 19.6 | 568 |
| Middle | (17.0) | 47 | 17.0 | 738 |
| Fourth | 37.4 | 76 | 19.6 | 775 |
| Highest | 13.3 | 112 | 21.3 | 847 |
| Total 15-49 | 21.8 | 306 | 19.5 | 3,457 |

Note: Table is based on de facto household members who were interviewed and tested. Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ HIV positive refers only to individuals infected with HIV-1.

Table 14.11 HIV prevalence by background characteristics: Young people age 15-24
Percentage HIV positive among women and men age 15-24 who were tested for HIV, by background characteristics, Swaziland 2006-07

| Background characteristic | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| Age |  |  |  |  |  |  |
| 15-19 | 10.1 | 1,151 | 1.9 | 1,271 | 5.8 | 2,422 |
| 15-17 | 6.2 | 717 | 1.4 | 836 | 3.6 | 1,553 |
| 18-19 | 16.4 | 435 | 2.7 | 435 | 9.6 | 870 |
| 20-24 | 38.4 | 922 | 12.3 | 780 | 26.5 | 1,702 |
| 20-22 | 35.6 | 583 | 9.1 | 527 | 23.0 | 1,110 |
| 23-24 | 43.3 | 339 | 19.1 | 252 | 33.0 | 592 |
| Marital status |  |  |  |  |  |  |
| Never married | 17.8 | 1,670 | 4.9 | 1,980 | 10.8 | 3,650 |
| Ever had sex | 28.3 | 915 | 8.6 | 824 | 19.0 | 1,739 |
| Never had sex | 5.0 | 756 | 2.1 | 1,156 | 3.3 | 1,912 |
| Married/living together | 42.2 | 384 | 29.9 | 59 | 40.6 | 443 |
| Divorced/separated/widowed | * | 19 | * | 12 | (56.7) | 31 |
| Currently pregnant |  |  |  |  |  |  |
| Pregnant | 34.8 | 142 | na | na | na | na |
| Not pregnant or not sure | 21.8 | 1,931 | na | na | na | na |
| Residence |  |  |  |  |  |  |
| Urban | 27.0 | 486 | 7.2 | 412 | 17.9 | 899 |
| Rural | 21.3 | 1,587 | 5.5 | 1,638 | 13.3 | 3,226 |
| Region |  |  |  |  |  |  |
| Hhohho | 27.8 | 516 | 5.5 | 483 | 17.0 | 998 |
| Manzini | 20.7 | 696 | 6.2 | 673 | 13.5 | 1,369 |
| Shiselweni | 21.9 | 459 | 5.3 | 486 | 13.4 | 945 |
| Lubombo | 20.5 | 403 | 6.3 | 409 | 13.4 | 812 |
| Education |  |  |  |  |  |  |
| No education | 49.5 | 80 | 12.8 | 76 | 31.6 | 156 |
| Primary | 26.1 | 705 | 5.3 | 850 | 14.7 | 1,555 |
| Secondary | 19.4 | 1,245 | 6.0 | 1,086 | 13.2 | 2,331 |
| More than secondary | (11.1) | 44 | (0.0) | 39 | 5.9 | 83 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 24.7 | 338 | 7.5 | 341 | 16.1 | 679 |
| Second | 23.0 | 375 | 5.9 | 377 | 14.4 | 751 |
| Middle | 23.5 | 416 | 5.2 | 486 | 13.6 | 902 |
| Fourth | 21.8 | 489 | 7.3 | 464 | 14.7 | 953 |
| Highest | 21.2 | 455 | 3.4 | 384 | 13.0 | 839 |
| Total | 22.7 | 2,074 | 5.9 | 2,051 | 14.3 | 4,124 |

Note: Table is based on de facto household members who were interviewed and tested. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na $=$ Not applicable
${ }^{1}$ HIV positive refers only to individuals infected with HIV-1.

Table 14.12 presents HIV prevalence rates by sexual behaviour indicators among youth age 15-24 who ever had sexual intercourse. Young women whose first sex was with a man ten or more years older have a higher prevalence of HIV (40 percent) compared with those whose first partner was less than ten years older ( 31 percent). Although the numbers are small, especially among women, there is a marked increase in the infection rates among both female and male youth who had two or more partners in the 12 months prior to the survey.

Young women who said that a condom was used during their first sexual encounter have a lower prevalence of HIV (29 percent) than those who did not use a condom (35 percent). The same is true for young men age 15-24: those who used a condom at first sex have a lower prevalence of HIV (8 percent) than those who did not use a condom ( 12 percent). Use of a condom at last sexual intercourse is associated with a substantially lower infection rate among young men and a somewhat higher infection rate among young women.

| Percentage HIV positive among ever sexually active women and men age 15-24 who were tested for HIV, by sexual behaviour, Swaziland 2006-07 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Women |  | Men |  | Total |  |
| Sexual behaviour characteristic | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number | Percentage HIV positive ${ }^{1}$ | Number |
| Relative age of first sexual partner |  |  |  |  |  |  |
| 10+ years older | 39.9 | 133 | na | na | na | na |
| $<10$ years older/same age/ younger/don't know | 31.0 | 1.113 | na | na | na | na |
| Missing | 47.3 | 72 | na | na | na | na |
| Higher-risk intercourse in past 12 months ${ }^{2}$ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Had higher-risk intercourse Had sexual intercourse, not higher risk | 31.6 | 794 | 11.0 | 631 | 22.5 | 1,425 |
|  | 39.1 | 359 | 23.7 | 57 | 37.0 | 416 |
| No sexual intercourse in past |  |  |  |  |  |  |
| 12 months | 25.3 | 166 | 5.9 | 207 | 14.5 | 373 |
| Number of sexual partners in past |  |  |  |  |  |  |
| 12 months |  |  |  |  |  |  |
| 0 | 25.3 | 166 | 5.9 | 207 | 14.5 | 373 |
| 1 | 33.4 | 1,108 | 9.7 | 489 | 26.1 | 1,596 |
| 2 | (44.2) | 42 | 16.4 | 171 | 21.8 | 213 |
| $3+$ | * | 3 | (29.7) | 26 | (34.5) | 29 |
| Number of higher-risk partners in past 12 months ${ }^{3}$ |  |  |  |  |  |  |
| 0 | 34.7 | 524 | 9.7 | 264 | 26.3 | 788 |
| 1 | 30.9 | 753 | 8.8 | 447 | 22.7 | 1,200 |
|  | (42.6) | 38 | 14.9 | 159 | 20.3 | 197 |
| 3+ |  | 2 | (27.0) | 25 | (29.2) | 27 |
| Condom use |  |  |  |  |  |  |
| Ever used a condom | 37.3 | 789 | 11.5 | 682 | 25.3 | 1,471 |
| Never used a condom | 26.3 | 525 | 8.0 | 213 | 21.0 | 738 |
| Missing | * | 4 | * | 0 | * | 4 |
| Condom use at first sex |  |  |  |  |  |  |
| Used condom | 29.0 | 568 | 8.3 | 419 | 20.2 | 987 |
| Did not use condom | 35.2 | 733 | 12.2 | 467 | 26.3 | 1,200 |
| Condom use at last sexual intercourse in past 12 months |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Used condom | 35.8 | 502 | 9.5 | 444 | 23.5 | 946 |
| Did not use condom | 32.5 | 650 | 16.7 | 244 | 28.2 | 894 |
| No sexual intercourse in past |  |  |  |  |  |  |
| 12 months | 25.3 | 166 | 5.9 | 207 | 14.5 | 373 |
| Total | 32.8 | 1,318 | 10.6 | 895 | 23.9 | 2,213 |
| Note: Table is based on de facto household members who were interviewed and tested. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. <br> na=Not applicable <br> ${ }^{1}$ HIV positive refers only to individuals infected with HIV-1. <br> ${ }^{2}$ Sexual intercourse with a partner who was neither a spouse nor lived with the respondent <br> ${ }^{3}$ A partner who was neither a spouse nor lived with the respondent, among the last three partners in the past <br> 12 months |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

### 14.6 HIV Prevalence among Couples

Both partners were tested in a total of 701 cohabiting couples in the SDHS. Results presented in Table 14.13 indicate that, among 55 percent of the cohabiting couples, both partners were HIV negative. Both partners were HIV positive among 29 percent of the couples. In eight percent of the couples, the male partner was infected and the female partner was not, while in nine percent, the female partner was infected and the male partner was not.

Table 14.13 HIV prevalence among couples
Percent distribution of couples living in the same household, both of whom were tested for HIV, by HIV status, according to background characteristics, Swaziland 2006-07

| Background characteristic | Both HIV positive ${ }^{1}$ | Man HIV positive ${ }^{1}$, woman HIV negative | Woman HIV positive ${ }^{1}$, man HIV negative | Both HIV negative | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Woman's age |  |  |  |  |  |  |
| 15-19 | 22.7 | 12.2 | 15.0 | 50.1 | 100.0 | 46 |
| 20-29 | 36.0 | 6.4 | 10.2 | 47.3 | 100.0 | 316 |
| 30-39 | 23.8 | 9.3 | 7.7 | 59.1 | 100.0 | 242 |
| 40-49 | 20.7 | 5.4 | 3.0 | 70.8 | 100.0 | 97 |
| Man's age |  |  |  |  |  |  |
| 15-19 | * | * | * | * | 100.0 | 1 |
| 20-29 | 28.9 | 5.2 | 15.5 | 50.4 | 100.0 | 172 |
| 30-39 | 36.8 | 8.5 | 6.5 | 48.2 | 100.0 | 286 |
| 40-49 | 19.4 | 8.5 | 6.5 | 65.6 | 100.0 | 242 |
| Age difference between partners |  |  |  |  |  |  |
| Woman older | * | * | * | * | 100.0 | 22 |
| Same age/man older by 0-4 years | 27.5 | 4.5 | 10.0 | 58.0 | 100.0 | 271 |
| Man older by 5-9 years | 28.4 | 9.6 | 6.3 | 55.7 | 100.0 | 277 |
| Man older by 10-14 years | 24.0 | 8.5 | 11.2 | 56.3 | 100.0 | 102 |
| Man older by $15+$ years | 51.7 | 16.9 | 9.4 | 21.9 | 100.0 | 29 |
| Type of union |  |  |  |  |  |  |
| Monogamous | 26.6 | 5.8 | 9.7 | 57.9 | 100.0 | 525 |
| Polygynous | 35.8 | 11.1 | 5.6 | 47.5 | 100.0 | 67 |
| Don't know/missing | 35.2 | 14.5 | 5.8 | 44.5 | 100.0 | 109 |
| Residence |  |  |  |  |  |  |
| Urban | 33.3 | 7.1 | 11.9 | 47.7 | 100.0 | 231 |
| Rural | 26.6 | 7.9 | 7.1 | 58.4 | 100.0 | 470 |
| Region |  |  |  |  |  |  |
| Hhohho | 29.9 | 7.8 | 8.2 | 54.2 | 100.0 | 217 |
| Manzini | 29.0 | 5.4 | 8.6 | 57.0 | 100.0 | 230 |
| Shiselweni | 26.6 | 9.4 | 9.1 | 55.0 | 100.0 | 111 |
| Lubombo | 28.6 | 9.9 | 9.3 | 52.2 | 100.0 | 143 |
| Woman's education |  |  |  |  |  |  |
| No education | 23.3 | 7.4 | 16.1 | 53.2 | 100.0 | 90 |
| Primary | 32.3 | 8.1 | 10.0 | 49.5 | 100.0 | 229 |
| Secondary | 31.6 | 9.0 | 6.5 | 52.9 | 100.0 | 306 |
| More than secondary | 13.7 | 1.2 | 4.7 | 80.4 | 100.0 | 76 |
| Man's education |  |  |  |  |  |  |
| No education | 27.0 | 13.2 | 9.0 | 50.8 | 100.0 | 91 |
| Primary | 28.3 | 8.6 | 10.5 | 52.6 | 100.0 | 219 |
| Secondary | 34.3 | 5.8 | 8.5 | 51.4 | 100.0 | 277 |
| More than secondary | 18.1 | 6.0 | 5.4 | 70.6 | 100.0 | 115 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 21.7 | 10.1 | 10.6 | 57.6 | 100.0 | 120 |
| Second | 34.4 | 11.5 | 8.5 | 45.7 | 100.0 | 116 |
| Middle | 27.2 | 6.3 | 7.7 | 58.8 | 100.0 | 108 |
| Fourth | 39.9 | 5.0 | 8.7 | 46.4 | 100.0 | 134 |
| Highest | 23.9 | 6.6 | 8.2 | 61.3 | 100.0 | 224 |
| Total | 28.8 | 7.7 | 8.7 | 54.8 | 100.0 | 701 |

[^21]
## ADULT AND MATERNAL MORTALITY


#### Abstract

Ann A. Way Earlier in this report, estimates of mortality during the first years of life were presented and discussed. This chapter examines the data relating to adult mortality collected in the 2006-07 Swaziland SDHS. The chapter specifically considers information obtained in the survey on maternal mortality, that is, the level of adult female mortality related to pregnancy and childbearing.


### 15.1 DATA

To obtain data on adult and maternal mortality, the 2006-07 SDHS questionnaire included a sibling survivorship history, which obtained a detailed account of the survivorship of all of the live-born children of the respondent's mother (i.e., maternal siblings). To obtain the sibling history, each respondent was first asked to give the total number of her mother's live births. The respondent was next asked to provide a list of all of the children born to her mother starting with the first-born. Then the respondent was asked whether each of these siblings was still alive at the survey date. For living siblings, current age was collected; for deceased siblings, age at death and years since death were collected. Interviewers were instructed that when a respondent could not provide precise information on age at death or years since death, approximate but quantitative answers were acceptable. For sisters who died at ages 12 years or above, three questions were used to determine whether the death was maternity-related: "Was [NAME OF SISTER] pregnant when she died?" and if negative, "Did she die during childbirth?" and if negative, "Did she die within two months after the end of a pregnancy or childbirth?" An additional question determined whether the death was due to an accident or other violent act. These data allow direct estimation of overall adult mortality (by age and sex) and maternal mortality.

The estimation of adult and maternal mortality requires reasonably accurate reporting of the number of sisters and brothers the respondent ever had, the number who died, and (for maternal mortality) the number of sisters who have died of maternity-related causes. There is no definitive procedure for establishing the completeness or accuracy of retrospective data on sibling survivorship. Table 15.1 examines several indicators of the quality of the sibling survivorship data from the SDHS, including the completeness of the reporting of sibling survivorship, the current age for surviving siblings, and the age at death and years since death for deceased siblings.

| Number of siblings reported by female survey respondents age 15-49 and completeness of reported data on age, age at death (AD), and years since death (YSD), Swaziland 2006-07 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Females |  | Males |  | Total |  |
|  | Number | Percentage | Number | Percentage | Number | Percentage |
| All siblings | 12,774 | 100.0 | 12,820 | 100.0 | 25,594 | 100.0 |
| Surviving | 10,871 | 85.1 | 10,722 | 83.6 | 21,592 | 84.4 |
| Deceased | 1,886 | 14.8 | 2,084 | 16.3 | 3,970 | 15.5 |
| Information missing | 17 | 0.1 | 15 | 0.1 | 32 | 0.1 |
| Surviving siblings | 10,871 | 100.0 | 10,722 | 100.0 | 21,592 | 100.0 |
| Age reported | 10,822 | 99.6 | 10,665 | 99.5 | 21,487 | 99.5 |
| Age missing | 49 | 0.4 | 57 | 0.5 | 105 | 0.5 |
| Deceased siblings | 1,886 | 100.0 | 2,084 | 100.0 | 3,970 | 100.0 |
| AD and YSD reported | 1,818 | 96.4 | 1,982 | 95.1 | 3,800 | 95.7 |
| Missing only AD | 30 | 1.6 | 48 | 2.3 | 78 | 2.0 |
| Missing only YSD | 14 | 0.7 | 23 | 1.1 | 37 | 0.9 |
| Missing both | 25 | 1.3 | 31 | 1.5 | 55 | 1.4 |

Of the 25,594 siblings reported in the sibling histories of SDHS respondents, survival status was not reported for 32 (less than 0.1 percent). Among surviving siblings, current ages (used to estimate exposure to death) were reported for virtually all surviving siblings ( 99.5 percent). Among deceased siblings, complete reporting of age at death and years since death was also nearly universal. For 96 percent of deceased siblings, both age at death and years since the death (or year of death) were reported. Both age at death and the years since death were missing for only around 1 percent of deceased siblings. Rather than exclude siblings with missing data from further analysis, information on the birth order of siblings in conjunction with other information was used to impute the missing data. ${ }^{1}$ The sibling survivorship data, including cases with imputed values, were used in the direct estimation of adult and maternal mortality.

### 15.2 Direct Estimates of Adult Mortality

The direct approach to estimating adult mortality employs information on the age of surviving siblings, the age at death of siblings who died, and the number of years since the sibling died. This approach allows the data to be aggregated to determine the number of person-years of exposure to mortality risk and the number of sibling deaths occurring in defined calendar periods. Adult mortality rates are obtained by dividing female or male adult deaths in the given calendar periods by person-years of exposure to death.

Table 15.2 shows age-specific mortality rates for men and women age 15-49 for the period 0-6 years before the 200607 SDHS. These results allow an assessment of the recent level of mortality in the population of reproductive age in Swaziland. Because the number of deaths on which the age-specific rates are based is not very large (between 75 and 340 unweighted deaths per age group for the total population), the estimated age-specific rates are subject to considerable sampling variation.

The results in Table 15.2 indicate that overall mortality is virtually identical among women and men in the repro-ductive-age population ( 14.4 deaths per 1,000 years of exposure, respectively). Considering the pattern within age groups, female mortality is substantially higher than male mortality among those under age 30 . The pattern is reversed for older men and women, with male mortality levels being higher than

Table 15.2 Adult mortality rates
Age-specific mortality rates for women and men age 15-49 based on the survivorship of sisters and brothers of survey respondents for the period $0-6$ years preceding the survey, Swaziland 2006-07

| Age | Deaths | Exposure | Mortality <br> rates |
| :--- | ---: | :---: | :---: |
| WOMEN |  |  |  |
| $15-19$ | 49 | 11,972 | 4.1 |
| $20-24$ | 146 | 12,335 | 11.9 |
| $25-29$ | 218 | 10,651 | 20.5 |
| $30-34$ | 155 | 8,644 | 18.0 |
| $35-39$ | 139 | 6,383 | 21.8 |
| $40-44$ | 80 | 4,074 | 19.7 |
| $45-49$ | 54 | 2,399 | 22.5 |
|  |  |  |  |
| Total | 841 | 56,458 | $14.4^{\text {a }}$ |
|  | MEN |  |  |
| $15-19$ | 26 | 11,960 | 2.2 |
| $20-24$ | 72 | 12,688 | 5.7 |
| $25-29$ | 127 | 10,481 | 12.1 |
| $30-34$ | 187 | 8,399 | 22.2 |
| $35-39$ | 151 | 6,230 | 24.2 |
| $40-44$ | 127 | 3,889 | 32.5 |
| $45-49$ | 83 | 2,231 | 37.0 |
|  |  |  |  |
| $15-49$ | 771 | 55,878 | $14.4^{\text {a }}$ |

${ }^{\text {a }}$ Rates are age-standardised. female mortality, particularly in the 40-49 age group (Figure 15.1).

[^22]
## Figure 15.1 Age-Specific Mortality Rates by Sex



SDHS 2006-07

### 15.3 Direct Estimates of Maternal Mortality

Maternal deaths are a subset of all female deaths and are associated with pregnancy and childbearing. Two survey methods are generally used to estimate maternal mortality in developing countries: the indirect sisterhood method (Graham et al., 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan, 1991). In this report, the direct estimation procedure is applied.

Age-specific estimates of maternal mortality from the reported survivorship of sisters are shown in Table 15.3 for the period 0-6 years before the survey. These rates were calculated by dividing the number of maternal deaths by woman-years of exposure. To remove the effect of truncation bias (the upper boundary for eligibility for women interviewed in the survey is 49 years), the overall rate for women age 15-49 was standardised by the age distribution of survey respondents. Maternal deaths were defined as any death that was reported as occurring during pregnancy, childbirth, or within two months after the birth or termination of a pregnancy. ${ }^{2}$ Estimates of maternal mortality are therefore based solely on the timing of the death in relationship to pregnancy.

[^23]The results in Table 15.3 indicate that the rate of mortality associated with pregnancy and childbearing is 0.8 maternal deaths per 1,000 woman-years of exposure. The estimated age-specific mortality rates increase with age to a peak in the 35-39 age group. However, the agespecific pattern should be interpreted with caution because of the small number of events-only 48 maternal deaths for women of all ages. Maternal deaths represent 6 percent of all deaths to women age 15-49 during the period 0-6 years preceding the survey (48 maternal deaths/841 female deaths). The low proportion of maternal deaths could be due to an increase in nonmaternal deaths (e.g., AIDS-related deaths) or to underreporting of maternal deaths in the survey.

The maternal mortality rate can be converted to a maternal mortality ratio by dividing the rate by the general fertility rate during the period 0-6 years prior to the 200607 SDHS. The maternal mortality ratio is expressed per 100,000 live births in order to emphasise the obstetrical risk of pregnancy and childbearing. The estimate of the maternal mortality ratio for the period prior to the survey

Table 15.3 Maternal mortality
Maternal mortality rates for the period 0-6 years preceding the survey, based on the survivorship of sisters of survey respondents, Swaziland 2006-07

| Age | Maternal <br> deaths | Exposure <br> (years) | Mortality <br> rates <br> $(1,000)$ |
| :--- | :---: | :---: | :---: |
| $15-19$ | 2 | 11,972 | 0.13 |
| $20-24$ | 9 | 12,335 | 0.75 |
| $25-29$ | 9 | 10,650 | 0.83 |
| $30-34$ | 11 | 8,644 | 1.26 |
| $35-39$ | 11 | 6,383 | 1.77 |
| $40-44$ | 6 | 4,074 | 1.42 |
| $45-49$ | 0 | 2,399 | 0.00 |
|  |  |  |  |
| Total 15-49 | 48 | 56,458 | 0.8 |
| General fertility rate ${ }^{1}$ |  | 0.131 |  |
| Maternal mortality ratio ${ }^{2}$ |  | 589 |  |

${ }^{1}$ Expressed per 1,000 woman-years of exposure
${ }^{2}$ Expressed per 100,000 live births; calculated as maternal mortality rate divided by the general fertility rate
${ }^{\text {a }}$ Rates are age-standardised. is 589 deaths per 100,000 live births, i.e., for every 1,000 births in Swaziland, there are just under six maternal deaths.

It should be noted that maternal mortality is a difficult indicator to measure because of the large sample sizes required to calculate an accurate estimate. (The fact that the maternal mortality ratio is expressed per 100,000 live births demonstrates that it is a relatively rare event.) As a result, the maternal mortality estimates are subject to large sampling errors.

# WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES 

## Rachel Masuku

In addition to information on women's education, employment status, and control of earnings, the 2006-07 SDHS also obtained information on other measures of women's status and empowerment. In particular, questions were asked about women's participation in specific household decisions, their degree of acceptance of wife beating, and their opinions about when a wife should be able to refuse sex with her husband. The data provide insight into women's control over their lives and environment as well as their attitudes toward traditional gender roles. These are important aspects of women's empowerment and helpful in understanding demographics and health behaviour.

The above questions are used to define three indicators of women's empowerment: women's participation in decisionmaking, women's degree of acceptance of wife beating, and women's degree of acceptance of a wife's right to refuse sex with her husband. The first measure requires little explanation, since the ability to make decisions about one's own life is of obvious importance to practical empowerment. The other two measures derive from the notion that gender equity is essential to empowerment. Responses indicating a view that the beating of wives by husbands is justified reflect a sanction of women's lower status, both absolutely and relative to men. Although such attitudes do not necessarily signify approval of men beating their wives, they do signify women's acceptance of norms that give men the right to discipline women with force. Similarly, beliefs about whether and when a woman can refuse sex with her husband reflect issues of gender equity regarding sexual rights and bodily integrity. Besides providing an important measure of empowerment, the information about women's attitudes toward sexual rights will be useful for improving and monitoring reproductive health programmes that depend on women's willingness and ability to control their own sexual lives.

Employed women who earn cash for their work were asked who the main decisionmaker is with regard to the use of their earnings. This information indicates women's control over their own earnings. In addition, they were asked who the main decisionmaker is regarding the use of their husband's earnings.

This information not only allows an evaluation of the relative importance of women's earnings in the household economy, but has implications for the empowerment of women. It is expected that employment and earnings are more likely to empower women if women perceive their earnings to be important for meeting the needs of their households.

### 16.1 Employment and Form of Earnings

Respondents were asked a number of questions to elicit their employment status at the time of the survey and the continuity of their employment in the 12 months prior to the survey. The measurement of women's employment is difficult because some of the activities that women do, especially work on family farms, family businesses, or in the informal sector, are often not perceived by women themselves as employment and hence are not reported as such. To avoid underestimating women's employment, in the 2006-07 SDHS women were asked several questions to ascertain their employment status. First women were asked, "Aside from your own housework, are you currently working?" Women who answered "no" to this question were then asked, "As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business, or work on the family farm or in the family business. Are your currently doing any of these things or any other work?" Women who answered
"no" to this question were asked, "Have you done any work in the last 12 months?" Women are considered currently employed if they answered "yes" to either of the first two questions. Women who answered "yes" to the third question are not currently employed but have worked in the past 12 months. All employed women were asked their occupation; whether they were paid in cash, in kind, or not at all; and for whom they worked.

Table 16.1 shows the percent distribution of women and men age $15-49$, by employment status and form of payment, according to age. Half of women ( 53 percent) and 86 percent of men are currently employed. Employment among women increases with age. The proportion of women who are employed is lowest among those in the age group 15-19 and increases gradually with age. The low percentage employed is expected at young ages because many in that age cohort are still in school. The proportion of men employed peaks in age group 35-39 and declines with increasing age.

Table 16.1 also shows that most women receive cash earnings ( 93 percent); 89 percent receive cash only and 4 percent receive payment in cash and in kind. For men, the corresponding proportions are 94 percent and 4 percent, respectively. No men reported receiving only in-kind payment, compared with 2 percent of women.

Table 16.1 Employment and cash earnings
Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Swaziland 2006-07

| Age | Currently married respondents: |  | Percent distribution of currently married respondents employed in the past 12 months, by type of earnings |  |  |  |  | Total | Number of respondents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage employed | Number of respondents | Cash only | Cash and in kind | In kind only | Not paid | Missing |  |  |
| WOMEN |  |  |  |  |  |  |  |  |  |
| 15-19 | 15.0 | 88 | * | * | * | * | * | 100.0 | 13 |
| 20-24 | 37.9 | 343 | 92.7 | 2.2 | 1.8 | 3.2 | 0.0 | 100.0 | 130 |
| 25-29 | 49.3 | 388 | 88.4 | 4.9 | 2.1 | 3.9 | 0.8 | 100.0 | 191 |
| 30-34 | 59.5 | 379 | 88.9 | 3.7 | 0.4 | 6.6 | 0.4 | 100.0 | 226 |
| 35-39 | 61.0 | 334 | 90.6 | 3.2 | 1.7 | 4.6 | 0.0 | 100.0 | 204 |
| 40-44 | 61.5 | 291 | 88.2 | 4.9 | 2.2 | 3.8 | 1.0 | 100.0 | 179 |
| 45-49 | 63.4 | 238 | 88.1 | 5.0 | 1.1 | 5.9 | 0.0 | 100.0 | 151 |
| Total 15-49 | 53.1 | 2,062 | 89.3 | 4.0 | 1.5 | 4.9 | 0.4 | 100.0 | 1,094 |
| MEN |  |  |  |  |  |  |  |  |  |
| 15-19 | * | 2 | * | * | * | * | * | 100.0 | 1 |
| 20-24 | 83.1 | 66 | 98.5 | 0.0 | 0.0 | 1.5 | 0.0 | 100.0 | 55 |
| 25-29 | 88.1 | 224 | 94.5 | 2.9 | 0.0 | 2.6 | 0.0 | 100.0 | 197 |
| 30-34 | 86.9 | 255 | 93.9 | 4.1 | 0.0 | 1.4 | 0.6 | 100.0 | 221 |
| 35-39 | 89.0 | 253 | 93.2 | 3.5 | 0.0 | 2.8 | 0.5 | 100.0 | 226 |
| 40-44 | 87.8 | 211 | 93.9 | 4.1 | 0.0 | 2.0 | 0.0 | 100.0 | 185 |
| 45-49 | 80.2 | 208 | 89.9 | 5.3 | 0.0 | 4.7 | 0.0 | 100.0 | 167 |
| Total 15-49 | 86.3 | 1,219 | 93.5 | 3.7 | 0.0 | 2.6 | 0.2 | 100.0 | 1,052 |
| Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. |  |  |  |  |  |  |  |  |  |

### 16.1.1 Women's Control Over Their Own Earnings and Relative Magnitude of Women's Earnings

Table 16.2.1 shows how women's degree of control over the use of their earnings varies by background characteristics. The data show that two in three ( 65 percent) of women decide for themselves how their earnings are used, 28 percent make the decisions jointly with their husband, and 4 percent reported that decisions are mainly made by their husband. Respondents' degree of control over the use of their earnings varies by background characteristics.

Table 16.2.1 Control over women's cash earnings and relative magnitude of women's earnings: Women
Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Swaziland 2006-07

| Background characteristic | Person who decides how the wife's cash earnings are used: |  |  |  |  |  | Women's cash earnings compared with husband's cash earnings: |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainly wife | Wife and husband jointly | Mainly husband | Other | Missing | Total | More | Less | About the same | Husband/ partner has no earnings | Don't know/ missing |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | 100.0 | * | * | * | * | * | 100.0 | 12 |
| 20-24 | 55.4 | 37.5 | 5.6 | 0.0 | 1.6 | 100.0 | 13.1 | 72.6 | 4.1 | 7.2 | 3.0 | 100.0 | 123 |
| 25-29 | 64.4 | 29.1 | 4.5 | 0.0 | 2.0 | 100.0 | 11.7 | 71.4 | 2.9 | 10.5 | 3.5 | 100.0 | 178 |
| 30-34 | 65.8 | 27.6 | 3.7 | 0.0 | 2.9 | 100.0 | 10.9 | 70.4 | 5.5 | 7.4 | 5.8 | 100.0 | 209 |
| 35-39 | 71.7 | 23.4 | 4.2 | 0.0 | 0.7 | 100.0 | 13.1 | 69.9 | 4.1 | 9.5 | 3.5 | 100.0 | 191 |
| 40-44 | 67.3 | 23.1 | 5.1 | 0.0 | 4.4 | 100.0 | 9.8 | 64.7 | 3.6 | 15.3 | 6.5 | 100.0 | 167 |
| 45-49 | 63.0 | 31.2 | 3.3 | 0.8 | 1.7 | 100.0 | 10.9 | 55.1 | 3.6 | 24.7 | 5.7 | 100.0 | 141 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 57.4 | 35.5 | 5.5 | 0.0 | 1.7 | 100.0 | 19.2 | 65.1 | 6.3 | 6.6 | 2.9 | 100.0 | 70 |
| 1-2 | 60.0 | 33.0 | 4.9 | 0.0 | 2.0 | 100.0 | 12.2 | 70.7 | 5.4 | 8.2 | 3.6 | 100.0 | 380 |
| 3-4 | 68.2 | 26.0 | 3.2 | 0.0 | 2.6 | 100.0 | 12.7 | 69.3 | 2.9 | 10.5 | 4.6 | 100.0 | 307 |
| 5+ | 70.8 | 22.2 | 4.3 | 0.4 | 2.2 | 100.0 | 7.6 | 62.2 | 2.6 | 20.8 | 6.8 | 100.0 | 264 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 60.8 | 32.1 | 3.7 | 0.0 | 3.4 | 100.0 | 11.7 | 72.4 | 5.5 | 4.3 | 6.0 | 100.0 | 356 |
| Rural | 67.4 | 26.2 | 4.6 | 0.2 | 1.6 | 100.0 | 11.6 | 65.2 | 3.1 | 16.2 | 4.0 | 100.0 | 664 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 61.3 | 31.7 | 5.5 | 0.0 | 1.5 | 100.0 | 9.5 | 68.4 | 3.0 | 15.4 | 3.7 | 100.0 | 313 |
| Manzini | 67.3 | 26.4 | 3.0 | 0.0 | 3.2 | 100.0 | 13.6 | 71.3 | 3.5 | 6.3 | 5.3 | 100.0 | 354 |
| Shiselweni | 68.7 | 25.2 | 2.3 | 0.0 | 3.8 | 100.0 | 10.2 | 60.4 | 4.4 | 18.7 | 6.2 | 100.0 | 136 |
| Lubombo | 64.6 | 28.3 | 6.0 | 0.5 | 0.6 | 100.0 | 12.4 | 65.5 | 5.8 | 12.2 | 4.1 | 100.0 | 217 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 69.1 | 26.7 | 3.6 | 0.6 | 0.0 | 100.0 | 13.0 | 68.6 | 2.5 | 12.4 | 3.4 | 100.0 | 187 |
| Lower primary | 71.0 | 20.2 | 5.7 | 0.0 | 3.1 | 100.0 | 8.5 | 69.1 | 3.7 | 12.8 | 5.9 | 100.0 | 106 |
| Higher primary | 71.2 | 23.8 | 4.4 | 0.0 | 0.6 | 100.0 | 9.5 | 64.6 | 4.6 | 18.0 | 3.4 | 100.0 | 205 |
| Secondary | 61.8 | 31.8 | 4.2 | 0.0 | 2.2 | 100.0 | 13.9 | 67.1 | 2.9 | 11.8 | 4.3 | 100.0 | 234 |
| High school | 59.8 | 32.0 | 4.5 | 0.0 | 3.7 | 100.0 | 13.3 | 68.0 | 4.2 | 8.7 | 5.8 | 100.0 | 193 |
| Tertiary | 56.1 | 34.0 | 3.9 | 0.0 | 6.0 | 100.0 | 8.0 | 72.0 | 7.9 | 4.7 | 7.4 | 100.0 | 95 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 72.0 | 19.0 | 7.2 | 0.0 | 1.8 | 100.0 | 7.5 | 57.8 | 2.8 | 25.7 | 6.2 | 100.0 | 119 |
| Second | 68.9 | 24.7 | 5.4 | 0.0 | 0.9 | 100.0 | 8.2 | 65.3 | 2.1 | 22.2 | 2.2 | 100.0 | 135 |
| Middle | 73.6 | 19.4 | 2.6 | 0.8 | 3.6 | 100.0 | 7.6 | 69.1 | 2.8 | 14.3 | 6.3 | 100.0 | 151 |
| Fourth | 70.0 | 22.4 | 4.1 | 0.0 | 3.4 | 100.0 | 13.5 | 69.5 | 2.7 | 8.0 | 6.3 | 100.0 | 243 |
| Highest | 54.8 | 40.0 | 3.8 | 0.0 | 1.4 | 100.0 | 14.6 | 70.0 | 6.3 | 5.7 | 3.4 | 100.0 | 373 |
| Total | 65.1 | 28.3 | 4.3 | 0.1 | 2.2 | 100.0 | 11.6 | 67.7 | 4.0 | 12.0 | 4.7 | 100.0 | 1,021 |

Older women and women with more children are more likely than other women to decide for themselves how their earnings are spent. Rural women are somewhat more independent in making their own decisions than urban women (67 percent and 61 percent, respectively). On the other hand, urban women are somewhat more likely than rural women to report that they make decisions about how the money they earn will be used jointly with their husband or partner. The percentage of women who make independent decisions on their earnings does not vary widely across regions. It ranges from 61 percent in Hhohho to 69 percent in Shiselweni. Women in Hhohho are most likely to decide jointly with their husband or partner on how to spend the money they earn.

It is interesting to note that better educated women and women who live in households in the higher wealth quintiles are more likely to say that decisions on use of their earnings are shared with their husbands. For example, while 34 percent of women with tertiary education decide jointly with their husband or partner how their earnings are used, the proportion among women with no education is 27 percent.

Table 16.2.1 also shows the women's perception of the magnitude of their earnings relative to those of their husband or partner by background characteristics. Sixty-eight percent of women report that their cash earnings are less than their husband's, 12 percent say that their earnings are more than their husband's, and 4 percent say that their earnings match their husband's. In addition, 12 percent of women say that their husband has no cash earnings. The data show that women with more children, those who live in rural areas, women with less education, and women in households in the lowest wealth quintiles are more likely to say that their husband does not earn cash income.

### 16.1.2 Control over Husband's Earnings

Table 16.2.2 shows women's and men's answers to questions about who decides how men's cash earnings are spent, by background characteristics. Overall, almost half (48 percent) of women say that these decisions are mainly made by their husbands, 38 percent say they make the decisions jointly with their husband, and 11 percent say that they are the main decisionmaker regarding their husband's income.

The background characteristics of the women do not show a clear pattern regarding who makes decisions on the husband's earnings. However, the proportion of women who report joint decisionmaking regarding their husband’s earnings decreases with age and number of children. Women in Hhohho are most likely and women in Shiselweni are least likely to decide jointly with their husband or partner how to spend the money the husband earns. Table 16.2.2 also shows that women in households in the lowest wealth quintile are more likely to say that the use of their husband's earnings is decided by the husband and the least likely to say that the decision is made jointly. Women in the highest wealth quintile have the opposite pattern: they are more likely to say that the decision on the use of their husband's earnings is made jointly and the least likely to say that the decision is made mainly by the husband.

Table 16.2.2 also shows the husband's perspective on who makes decisions about the men's earnings. In general, 56 percent of men say that decisions are mainly made jointly with their wives, 37 percent say they make the decisions, and 6 percent say that their wives are the main decisionmaker regarding their income. As in the case of married women, the background characteristics of married men show no clear pattern regarding who makes decisions about their earnings.

| Table 16.2.2 Control over men's cash earnings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distributions of currently married women age 15-49 whose husbands receive cash earnings and of currently married men age 15-49 who receive cash earnings, by person who decides how men's cash earnings are used, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Women |  |  |  |  |  |  | Men |  |  |  |  |  |  |
| Background characteristic | Mainly wife | Husband and wife jointly | Mainly husband | Other | Missing | Total | Number | Mainly wife | Husband and wife jointly | Mainly husband | Other | Missing | Total | Number |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | * |  | * | * | * | 100.0 | 10 | * | * | * | * | * | 100.0 | 1 |
| 20-24 | 10.1 | 46.3 | 41.2 | 0.7 | 1.7 | 100.0 | 110 | 2.1 | 53.2 | 44.7 | 0.0 | 0.0 | 100.0 | 54 |
| 25-29 | 10.1 | 45.2 | 42.4 | 0.0 | 2.2 | 100.0 | 158 | 7.0 | 51.8 | 40.6 | 0.0 | 0.6 | 100.0 | 192 |
| 30-34 | 10.1 | 36.2 | 50.1 | 0.4 | 3.2 | 100.0 | 191 | 6.4 | 55.8 | 37.0 | 0.6 | 0.2 | 100.0 | 217 |
| 35-39 | 14.0 | 36.7 | 49.3 | 0.0 | 0.0 | 100.0 | 171 | 5.7 | 58.6 | 34.4 | 0.0 | 1.3 | 100.0 | 218 |
| 40-44 | 8.3 | 30.5 | 56.0 | 0.0 | 5.3 | 100.0 | 140 | 4.8 | 59.2 | 36.0 | 0.0 | 0.0 | 100.0 | 182 |
| 45-49 | 13.9 | 35.4 | 47.1 | 0.0 | 3.6 | 100.0 | 100 | 4.8 | 57.2 | 36.8 | 0.6 | 0.6 | 100.0 | 159 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 11.6 | 47.5 | 39.0 | 0.0 | 1.9 | 100.0 | 62 | 2.5 | 62.7 | 33.0 | 0.0 | 1.8 | 100.0 | 85 |
| 1-2 | 8.6 | 42.4 | 46.6 | 0.2 | 2.2 | 100.0 | 346 | 8.9 | 54.3 | 36.5 | 0.0 | 0.3 | 100.0 | 380 |
| 3-4 | 12.5 | 37.6 | 46.6 | 0.3 | 3.0 | 100.0 | 271 | 3.5 | 61.2 | 33.9 | 0.8 | 0.5 | 100.0 | 268 |
| 5+ | 12.4 | 29.9 | 54.9 | 0.0 | 2.8 | 100.0 | 203 | 4.1 | 52.7 | 42.8 | 0.0 | 0.4 | 100.0 | 290 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 10.3 | 39.9 | 46.2 | 0.0 | 3.6 | 100.0 | 336 | 4.1 | 56.0 | 39.5 | 0.0 | 0.4 | 100.0 | 469 |
| Rural | 11.2 | 37.5 | 49.1 | 0.3 | 1.9 | 100.0 | 545 | 6.9 | 56.7 | 35.4 | 0.4 | 0.6 | 100.0 | 554 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 7.6 | 43.5 | 47.1 | 0.0 | 1.8 | 100.0 | 262 | 3.9 | 53.6 | 41.8 | 0.0 | 0.6 | 100.0 | 324 |
| Manzini | 12.9 | 38.0 | 45.9 | 0.0 | 3.2 | 100.0 | 322 | 7.3 | 57.8 | 34.4 | 0.4 | 0.1 | 100.0 | 331 |
| Shiselweni | 11.4 | 32.6 | 51.3 | 0.0 | 4.7 | 100.0 | 110 | 10.2 | 58.3 | 31.5 | 0.0 | 0.0 | 100.0 | 123 |
| Lubombo | 11.8 | 35.5 | 50.7 | 0.9 | 1.3 | 100.0 | 188 | 3.2 | 57.2 | 38.0 | 0.4 | 1.2 | 100.0 | 244 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 12.3 | 42.5 | 44.0 | 0.5 | 0.7 | 100.0 | 158 | 7.0 | 43.0 | 49.1 | 0.0 | 0.9 | 100.0 | 114 |
| Lower primary | 13.1 | 27.0 | 56.2 | 0.0 | 3.7 | 100.0 | 90 | 5.4 | 64.5 | 29.6 | 0.0 | 0.5 | 100.0 | 100 |
| Higher primary | 11.8 | 34.3 | 52.6 | 0.5 | 0.7 | 100.0 | 165 | 5.4 | 59.4 | 34.6 | 0.6 | 0.0 | 100.0 | 177 |
| Secondary | 10.1 | 42.7 | 45.3 | 0.0 | 1.9 | 100.0 | 206 | 5.0 | 53.8 | 40.2 | 0.0 | 1.0 | 100.0 | 220 |
| High school | 11.5 | 40.0 | 44.4 | 0.0 | 4.1 | 100.0 | 173 | 5.4 | 53.6 | 40.2 | 0.6 | 0.2 | 100.0 | 209 |
| Tertiary | 5.0 | 37.5 | 51.1 | 0.0 | 6.4 | 100.0 | 89 | 6.0 | 62.9 | 30.6 | 0.0 | 0.5 | 100.0 | 202 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 11.0 | 25.8 | 60.6 | 0.0 | 2.5 | 100.0 | 86 | 9.3 | 53.1 | 33.9 | 2.4 | 1.2 | 100.0 | 92 |
| Second | 10.9 | 36.2 | 50.8 | 0.8 | 1.2 | 100.0 | 100 | 3.9 | 67.6 | 28.5 | 0.0 | 0.0 | 100.0 | 114 |
| Middle | 10.0 | 28.5 | 55.6 | 0.6 | 5.2 | 100.0 | 126 | 7.0 | 55.0 | 37.2 | 0.0 | 0.8 | 100.0 | 147 |
| Fourth | 13.2 | 33.3 | 50.4 | 0.0 | 3.2 | 100.0 | 221 | 6.4 | 48.9 | 44.3 | 0.0 | 0.4 | 100.0 | 251 |
| Highest | 9.7 | 49.0 | 39.7 | 0.0 | 1.5 | 100.0 | 348 | 4.3 | 59.0 | 36.3 | 0.0 | 0.5 | 100.0 | 419 |
| Total 15-49 | 10.9 | 38.4 | 48.0 | 0.2 | 2.5 | 100.0 | 881 | 5.6 | 56.4 | 37.3 | 0.2 | 0.5 | 100.0 | 1,023 |
| Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. na $=$ Not applicable |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 16.3 shows that the majority of currently married women say that they decide themselves how their earnings are used, regardless of the amount they earn relative to their husband's earnings. For example, 59 percent of women who earn more than their husband or partner decide on their own how to spend their own earnings, 70 percent of women who earn less than their husband or partner decide on their own, and 63 percent of women with husbands who have no income decide themselves. Women who earn the same amount as their husband or partner are more likely to make joint decisions on the use of both their earnings and those of their husband or partner than women who earn either more or less than their husbands.

Husbands or partners are much more likely to make sole decisions on the use of their own earnings when their wife or partner has no cash earnings ( 68 percent) or when the wife or partner has less income ( 51 percent). The predominance of men in decisionmaking regarding their own income is shown by the high percentage of women who say that their husband or partner is the main decisionmaker in the use of their income even if the woman's income is more than that of her husband or partner.

Table 16.3 Women's control over their own earnings and over those of their husbands
Percent distributions of currently married women age 15-49 with cash earnings in the past 12 months by person who decides how the woman's cash earnings are used and of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between woman's and husband's cash earnings, Swaziland 2006-07

|  | Person who decides how the wife's cash earnings are used: |  |  |  |  | Person who decides how husband's cash earnings are used: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Woman's earnings relative <br> to husband's earnings | Mainly wife | Wife and husband jointly | Mainly husband | Other | Missing | Total | Number | Mainly wife | Wife and husband jointly | Mainly husband | Other | Missing | Total | Number of women |
| More than husband | 59.0 | 34.4 | 6.6 | 0.0 | 0.0 | 100.0 | 119 | 9.4 | 47.1 | 43.5 | 0.0 | 0.0 | 100.0 | 108 |
| Less than husband | 69.9 | 25.3 | 4.8 | 0.0 | 0.0 | 100.0 | 691 | 11.4 | 37.1 | 51.3 | 0.2 | 0.0 | 100.0 | 687 |
| Same as husband | (33.5) | (63.8) | (2.8) | (0.0) | (0.0) | 100.0 | 41 | (5.1) | (67.8) | (27.0) | (0.0) | (0.0) | 100.0 | 41 |
| Husband has no cash earnings/did not work | 63.2 | 35.2 | 1.6 | 0.0 | 0.0 | 100.0 | 123 | na | na | na | na | na | na | 0 |
| Woman has no cash earnings | na | na | na | na | na | na | 0 | 1.4 | 27.0 | 67.7 | 2.5 | 1.4 | 100.0 | 66 |
| Woman did not work in past 12 months | na | na | na | na | na | na | 0 | 5.8 | 38.8 | 52.1 | 0.7 | 2.6 | 100.0 | 827 |
| Don't know/missing | (42.2) | (8.1) | (0.0) | (2.4) | (47.2) | 100.0 | 48 | (12.0) | (11.6) | (27.3) | (0.0) | (49.1) | 100.0 | 46 |
| Total ${ }^{1}$ | 65.1 | 28.3 | 4.3 | 0.1 | 2.2 | 100.0 | 1,021 | 8.1 | 38.2 | 50.6 | 0.5 | 2.5 | 100.0 | 1,774 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
na $=$ Not applicable
${ }^{1}$ Excludes cases where a woman or her husband/partner has no earnings and includes cases where a woman does not know whether she earned more or less than her husband/partner

### 16.2 Woman's Participation in Decisionmaking

The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment. In order to assess women's decisionmaking autonomy, information was collected on women's participation in five different types of decisions: on the respondent's own health care, on making large household purchases, on making household purchases for daily needs, on visits to the woman's family or relatives, and on what food should be cooked each day.

Table 16.4 shows the percent distribution of women according to who in the household usually has the final say on each of these decisions. The data show that for two of the four decisions (respondent's own health care and making household purchases for daily needs), the women themselves are the main decisionmakers. For making large household purchases, 42 percent of women say that the decision is made jointly with their husbands or partners and 35 percent say that the decision is made mainly by their husbands or partners. Decisions to visit the woman's family or relatives are more likely to be made by husbands (45 percent).

Table 16.4 Women's participation in decisionmaking
Percent distribution of currently married women by person who usually makes decisions about four kinds of issues, Swaziland 2006-07

| Decision | Mainly wife | Wife and husband jointly | Mainly husband | Someone else | Other | Missing | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Own health care | 36.2 | 31.8 | 28.5 | 0.9 | 0.2 | 2.3 | 100.0 | 2,062 |
| Major household purchases | 18.9 | 42.2 | 35.4 | 0.9 | 0.2 | 2.2 | 100.0 | 2,062 |
| Purchases of daily household needs | 56.5 | 23.6 | 16.4 | 1.2 | 0.1 | 2.2 | 100.0 | 2,062 |
| Visits to her family or relatives | 20.3 | 31.1 | 44.9 | 0.8 | 0.5 | 2.3 | 100.0 | 2,062 |

Table 16.5 shows the percentage of women who report that they decide alone or jointly about specific household decisions, according to background characteristics. The results indicate that the majority of currently married women participate in making decisions on purchases for daily household needs ( 80 percent), their own health care ( 68 percent), and major household purchases ( 61 percent). It is in the decisions regarding visits to her family or relatives that women are less likely to have any say ( 51 percent). Overall, 36 percent of currently married women participate in all of the four specified decisions and only 11 percent say that they do not participate in any of the decisions.

The degree of independence in making household decisions increases with age and number of children. Urban women, women who earn cash, and the most educated women are more likely to have a final say in all given decisions. Across regions, women in Manzini are the most likely to have participated in all household decisions, while women in Lubombo are the least likely to participate in decisionmaking (42 percent compared with 25 percent).

| Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Own health care | Making major household purchases | Making purchases for daily household needs | Visits to her family or relatives | Percentage who participate in all four decisions | Percentage who participate in none of the four decisions | Number of women |
| Age |  |  |  |  |  |  |  |
| 15-19 | 60.7 | 48.8 | 74.0 | 30.7 | 20.2 | 19.7 | 88 |
| 20-24 | 67.8 | 55.1 | 75.8 | 51.3 | 32.7 | 11.0 | 343 |
| 25-29 | 66.7 | 55.9 | 78.2 | 49.2 | 32.5 | 12.0 | 388 |
| 30-34 | 65.0 | 65.3 | 79.9 | 48.2 | 33.9 | 12.2 | 379 |
| 35-39 | 69.9 | 62.8 | 84.0 | 56.4 | 37.4 | 6.8 | 334 |
| 40-44 | 68.5 | 64.0 | 81.0 | 53.8 | 37.8 | 11.0 | 291 |
| 45-49 | 74.6 | 70.4 | 85.5 | 57.7 | 48.2 | 7.1 | 238 |
| Employment (past 12 months) |  |  |  |  |  |  |  |
| Not employed | 62.7 | 53.6 | 75.9 | 48.7 | 30.8 | 14.0 | 902 |
| Employed for cash | 74.3 | 68.3 | 84.4 | 54.7 | 41.4 | 7.5 | 1,021 |
| Employed not for cash | 60.0 | 57.3 | 76.5 | 33.7 | 18.0 | 10.7 | 69 |
| Missing | 53.1 | 56.8 | 75.6 | 55.0 | 30.3 | 13.3 | 70 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 64.1 | 59.8 | 75.8 | 48.7 | 32.2 | 17.2 | 166 |
| 1-2 | 68.5 | 60.1 | 81.1 | 50.8 | 36.1 | 9.2 | 772 |
| 3-4 | 70.0 | 61.5 | 79.2 | 52.9 | 37.4 | 11.7 | 570 |
| 5+ | 66.5 | 62.6 | 81.0 | 51.5 | 34.2 | 9.5 | 554 |
| Residence |  |  |  |  |  |  |  |
| Urban | 74.9 | 69.5 | 78.6 | 62.2 | 48.1 | 12.0 | 542 |
| Rural | 65.6 | 58.1 | 80.7 | 47.5 | 31.2 | 10.1 | 1,520 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 69.6 | 58.8 | 79.5 | 53.2 | 36.9 | 10.6 | 600 |
| Manzini | 71.7 | 64.7 | 81.1 | 57.0 | 41.5 | 10.6 | 650 |
| Shiselweni | 67.4 | 61.6 | 79.1 | 53.8 | 36.5 | 12.6 | 363 |
| Lubombo | 61.1 | 58.6 | 80.3 | 38.9 | 24.7 | 9.1 | 449 |
| Education |  |  |  |  |  |  |  |
| No education | 66.6 | 60.7 | 78.5 | 47.2 | 33.7 | 10.1 | 385 |
| Lower primary | 59.9 | 52.8 | 78.2 | 52.3 | 28.4 | 12.1 | 253 |
| Higher primary | 70.1 | 59.7 | 81.4 | 48.6 | 32.5 | 9.0 | 467 |
| Secondary | 72.0 | 62.5 | 84.4 | 55.8 | 39.0 | 8.5 | 478 |
| High school | 65.0 | 64.7 | 77.1 | 50.6 | 38.1 | 14.4 | 338 |
| Tertiary | 73.1 | 68.7 | 76.1 | 57.4 | 46.8 | 13.1 | 142 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 60.1 | 50.3 | 75.4 | 42.3 | 25.7 | 12.8 | 353 |
| Second | 65.7 | 56.3 | 80.2 | 43.0 | 28.1 | 11.4 | 369 |
| Middle | 67.3 | 57.7 | 78.8 | 50.0 | 32.2 | 12.1 | 379 |
| Fourth | 68.2 | 63.7 | 79.5 | 53.9 | 36.7 | 10.3 | 424 |
| Highest | 75.3 | 71.9 | 84.5 | 62.1 | 48.9 | 7.8 | 537 |
| Total | 68.0 | 61.1 | 80.1 | 51.4 | 35.6 | 10.6 | 2,062 |

Figure 16.1 Number of Decisions in Which Married Women Participate


### 16.3 Attitudes Towards Wife Beating

To assess women's degree of acceptance of wife beating, the 2006-07 SDHS asked women, "Sometimes a husband is annoyed or angered by things which his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations?" The six situations presented to women for their opinion are: if she burns the food, if she argues with him, if she goes out without telling him, if she neglects the children, if she refuses to have sex with him, and if she has sex with other men.

The first six columns in Table 16.6.1 show how acceptance of wife beating varies for each reason. The last column gives the percentages of women who feel that wife beating is justified for at least one of the given reasons. A woman who believes that a husband is justified in hitting or beating his wife for any reason at all may believe herself to be of low status, both absolutely and relative to men. Such a perception could act as a barrier to accessing health care for her and her children, could affect her attitude toward contraceptive use, and could impact her general well being.

Table 16.6.1 shows that approximately four in ten women believe that a husband is justified in beating his wife for at least one of the six specified reasons. As head of household, a man is traditionally an important figure in Swazi family life. Hence, a woman who argues with her husband is considered disrespectful. Traditional customs teach women to be submissive and tolerant of marital problems including wife beating, so it is encouraging to note that the majority of women in Swaziland do not subscribe to that notion. Thirty-three percent of women believe that a husband is justified in beating his wife if she has sex with other men; 17 percent think that a husband is justified in beating his wife if she argues with him.

| Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Husband is justified in hitting or beating his wife if she: |  |  |  |  |  | Percentage who agree with at least one specified reason | Number |
| Background characteristic | Burns the food | Argues with him | Goes out without telling him | Neglects the children | Refuses to have sexual intercourse with him | Has sex with other men |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 4.9 | 28.0 | 18.1 | 22.2 | 4.0 | 47.7 | 54.3 | 1,274 |
| 20-24 | 2.2 | 17.7 | 7.8 | 10.8 | 2.3 | 34.8 | 40.1 | 1,046 |
| 25-29 | 1.9 | 12.0 | 4.4 | 6.7 | 3.2 | 26.3 | 29.9 | 729 |
| 30-34 | 2.9 | 11.3 | 4.6 | 5.9 | 3.3 | 25.0 | 29.0 | 616 |
| 35-39 | 1.7 | 9.7 | 5.8 | 4.8 | 1.9 | 22.8 | 28.0 | 503 |
| 40-44 | 1.6 | 11.0 | 5.8 | 5.5 | 3.7 | 22.9 | 26.6 | 438 |
| 45-49 | 2.8 | 14.5 | 8.7 | 7.1 | 5.6 | 26.1 | 33.3 | 383 |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |
| Not employed | 3.6 | 18.7 | 11.8 | 13.5 | 3.6 | 37.3 | 43.2 | 2,632 |
| Employed for cash | 1.9 | 13.9 | 5.4 | 7.4 | 2.9 | 25.8 | 30.2 | 2,072 |
| Employed not for cash | 5.4 | 29.0 | 9.1 | 15.4 | 3.6 | 44.2 | 48.7 | 106 |
| Missing | 2.9 | 23.0 | 16.0 | 16.6 | 4.3 | 38.5 | 44.0 | 177 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 3.0 | 19.1 | 10.9 | 14.8 | 2.5 | 37.1 | 42.3 | 2,487 |
| Married or living together | 2.6 | 15.3 | 7.8 | 7.5 | 3.6 | 29.1 | 34.0 | 2,062 |
| Divorced/separated/widowed | 3.2 | 13.9 | 6.6 | 7.3 | 6.8 | 24.9 | 31.5 | 438 |
| Number of living children |  |  |  |  |  |  |  |  |
| 0 | 3.6 | 22.0 | 13.4 | 16.7 | 3.5 | 40.5 | 46.6 | 1,601 |
| 1-2 | 2.9 | 16.7 | 8.0 | 10.1 | 3.0 | 30.9 | 35.2 | 1,754 |
| 3-4 | 3.1 | 12.9 | 6.3 | 7.4 | 2.7 | 25.7 | 30.9 | 887 |
| $5+$ | 1.2 | 12.2 | 6.8 | 6.0 | 4.5 | 28.9 | 34.2 | 745 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 1.8 | 9.3 | 4.0 | 6.1 | 1.6 | 20.5 | 23.4 | 1,330 |
| Rural | 3.3 | 19.9 | 11.1 | 13.0 | 3.9 | 37.2 | 43.2 | 3,657 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 2.0 | 13.0 | 6.3 | 9.1 | 3.0 | 27.9 | 32.1 | 1,340 |
| Manzini | 2.0 | 13.5 | 7.7 | 9.3 | 2.2 | 28.7 | 31.7 | 1,647 |
| Shiselweni | 3.1 | 17.3 | 10.8 | 11.3 | 3.7 | 37.9 | 45.2 | 1,033 |
| Lubombo | 5.5 | 28.5 | 14.2 | 16.8 | 5.1 | 40.8 | 48.9 | 966 |
| Education |  |  |  |  |  |  |  |  |
| No education | 3.8 | 17.8 | 8.4 | 11.1 | 3.8 | 32.7 | 37.3 | 884 |
| Lower primary | 4.3 | 26.5 | 13.9 | 14.2 | 5.0 | 39.3 | 45.9 | 525 |
| Higher primary | 3.1 | 18.6 | 10.8 | 13.0 | 4.2 | 37.1 | 43.4 | 1,167 |
| Secondary | 2.5 | 15.3 | 9.1 | 10.0 | 2.7 | 32.0 | 36.5 | 1,220 |
| High school | 1.9 | 14.6 | 7.4 | 9.6 | 2.1 | 27.8 | 32.8 | 803 |
| Tertiary | 1.5 | 8.5 | 4.5 | 7.8 | 1.8 | 23.4 | 27.4 | 387 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 4.7 | 26.7 | 13.9 | 17.8 | 6.9 | 42.4 | 49.9 | 785 |
| Second | 3.0 | 21.9 | 11.9 | 13.4 | 4.7 | 40.6 | 47.4 | 862 |
| Middle | 3.2 | 16.3 | 10.7 | 10.7 | 2.8 | 34.8 | 39.9 | 968 |
| Fourth | 2.8 | 15.8 | 8.6 | 11.2 | 2.2 | 32.4 | 36.9 | 1,111 |
| Highest | 1.4 | 9.5 | 4.0 | 5.6 | 1.6 | 20.1 | 23.5 | 1,262 |
| Total | 2.9 | 17.1 | 9.2 | 11.1 | 3.3 | 32.7 | 37.9 | 4,987 |

Table 16.6.1 also shows the attitudes towards wife beating by the respondent's background characteristics. The percentage of women who agree with at least one of the specified reasons justifying wife beating is higher among younger women and women with no children. Women who are employed for cash ( 30 percent); women who are divorced, separated, or widowed ( 32 percent); and women who live in urban areas ( 23 percent) are less likely to agree with at least one of the reasons for wife beating than those who are not employed ( 43 percent), or employed but not for cash ( 49 percent), never married ( 42 percent), or live in rural areas (43 percent).

Differentials by region and wealth status are also notable; women in the Shiselweni (45 percent) and Lubombo (49 percent) regions and women in the lowest and second wealth quintiles ( 50 percent and 47 percent, respectively) are more likely to agree with at least one of the specified reasons for wife beating than those who live in the Manzini and Hhohho regions ( 32 percent each) and women in the highest wealth quintile ( 24 percent).

Men share similar views with women on the subject of wife beating (see Table 16.6.2). Two in five men believe that a husband is justified in beating his wife for at least one of the six specified reasons. As is true among women, three in ten men believe that a husband is justified in beating his wife if she has sex with other men. As with women, younger men and men with no children are more likely to agree with at least one of the specified reasons justifying wife beating than older men and men with any children. Unemployed men are much more likely than men who are employed for cash to agree with any reason to beat a wife ( 48 percent compared with 34 percent). Forty-five percent of rural men agree with at least one of the specified reasons justifying wife beating compared with 31 percent of urban men.

Table 16.6.2 Attitude toward wife beating: Men
Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Swaziland 2006-07

| Background characteristic | Husband is justified in hitting or beating his wife if she: |  |  |  |  |  | Percentage who agree with at least one specified reason | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Burns the food | Argues with him | Goes out without telling him | Neglects the children | Refuses to have sexual intercourse with him | Has sex with other men |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 8.1 | 34.5 | 23.7 | 25.9 | 5.4 | 46.1 | 58.9 | 1,323 |
| 20-24 | 3.0 | 24.5 | 15.3 | 14.9 | 2.9 | 27.3 | 41.6 | 886 |
| 25-29 | 1.1 | 16.4 | 9.6 | 9.6 | 2.6 | 20.6 | 31.5 | 624 |
| 30-34 | 2.0 | 14.7 | 10.5 | 8.2 | 2.5 | 18.9 | 29.1 | 431 |
| 35-39 | 1.0 | 8.7 | 7.7 | 6.9 | 2.2 | 14.4 | 21.9 | 367 |
| 40-44 | 2.4 | 14.3 | 6.3 | 8.3 | 2.2 | 13.8 | 24.8 | 269 |
| 45-49 | 5.5 | 13.0 | 8.0 | 5.6 | 5.5 | 19.4 | 27.6 | 256 |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |
| Not employed | 5.7 | 27.7 | 18.5 | 18.9 | 4.2 | 36.3 | 48.2 | 1,833 |
| Employed for cash | 2.5 | 17.9 | 11.6 | 11.3 | 3.0 | 22.3 | 33.5 | 2,114 |
| Employed not for cash | 6.6 | 26.8 | 16.7 | 21.4 | 5.7 | 31.6 | 46.1 | 201 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 5.3 | 27.2 | 17.9 | 19.1 | 4.1 | 34.3 | 46.8 | 2,734 |
| Married or living together | 1.9 | 13.0 | 8.7 | 7.0 | 2.4 | 18.6 | 27.7 | 1,219 |
| Divorced/separated/widowed | 3.0 | 19.4 | 10.9 | 10.9 | 6.1 | 18.1 | 34.4 | 203 |
| Number of living children |  |  |  |  |  |  |  |  |
| 0 | 5.7 | 28.5 | 19.0 | 20.3 | 4.4 | 36.7 | 49.3 | 2,500 |
| 1-2 | 1.4 | 14.0 | 8.6 | 8.3 | 2.2 | 17.1 | 27.3 | 835 |
| 3-4 | 1.8 | 14.2 | 8.0 | 6.3 | 2.9 | 17.9 | 27.3 | 424 |
| 5+ | 2.8 | 13.4 | 9.5 | 7.1 | 3.5 | 16.4 | 27.8 | 397 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 1.8 | 14.1 | 9.5 | 9.6 | 2.5 | 20.8 | 30.5 | 1,181 |
| Rural | 5.1 | 26.1 | 17.0 | 17.4 | 4.2 | 32.1 | 44.6 | 2,975 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 2.4 | 17.6 | 12.0 | 13.3 | 3.0 | 25.8 | 35.4 | 1,099 |
| Manzini | 4.2 | 21.7 | 15.0 | 15.4 | 3.1 | 28.5 | 39.8 | 1,349 |
| Shiselweni | 4.6 | 23.6 | 15.0 | 14.6 | 3.6 | 29.8 | 41.0 | 843 |
| Lubombo | 6.0 | 29.7 | 18.3 | 17.8 | 5.6 | 32.8 | 48.1 | 865 |
| Education |  |  |  |  |  |  |  |  |
| No education | 4.1 | 21.1 | 11.5 | 12.2 | 6.1 | 24.2 | 37.8 | 316 |
| Lower primary | 7.5 | 29.7 | 22.0 | 22.7 | 6.9 | 36.5 | 48.7 | 470 |
| Higher primary | 6.5 | 31.1 | 20.5 | 20.2 | 6.0 | 36.1 | 50.7 | 980 |
| Secondary | 3.8 | 23.8 | 15.2 | 15.5 | 2.4 | 31.8 | 43.7 | 1,191 |
| High school | 1.5 | 14.3 | 9.8 | 10.1 | 1.1 | 20.6 | 30.3 | 852 |
| Tertiary | 1.0 | 7.7 | 4.1 | 5.1 | 1.5 | 13.0 | 18.6 | 347 |
|  |  |  |  |  |  |  |  | tinued... |

Table 16.6.2-Continued

| Background characteristic | Husband is justified in hitting or beating his wife if she: |  |  |  |  |  | Percentage who agree with at least one specified reason | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Burns the food | Argues with him | Goes out without telling him | Neglects the children | Refuses to have sexual intercourse with him | Has sex with other men |  |  |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 6.0 | 33.0 | 20.0 | 20.5 | 5.4 | 36.9 | 53.1 | 601 |
| Second | 4.9 | 29.2 | 20.2 | 20.7 | 4.2 | 35.9 | 47.7 | 665 |
| Middle | 6.1 | 25.1 | 16.0 | 18.5 | 4.4 | 30.4 | 43.8 | 856 |
| Fourth | 3.9 | 20.3 | 13.4 | 13.2 | 3.7 | 27.8 | 38.1 | 953 |
| Highest | 1.4 | 13.1 | 9.2 | 8.0 | 1.8 | 20.0 | 29.0 | 1,081 |
| Total 15-49 | 4.2 | 22.7 | 14.9 | 15.2 | 3.7 | 28.9 | 40.6 | 4,156 |

Note: Total includes eight men with information missing on employment.

Poorer men and men with limited education are more likely to accept wife beating than wealthier men and better educated men. Acceptance of wife beating also varies by region. The percentage of men who accept wife beating for any of the specified reasons ranges from 35 percent in Hhohho to 48 percent in Lubombo.

### 16.4 Attitudes Towards Refusing Sex with Husband

The extent of control women have over when and with whom they have sex has important implications for demographic and health outcomes. To measure women's agreement with the idea that a woman has the right to refuse to have sex with her husband, the 2006-07 SDHS asked respondents whether a wife is justified in refusing to have sex with her husband under five circumstances: she knows her husband has a sexually transmitted disease, she knows her husband has had sex with other women, she has recently given birth, she is tired or not in the mood, and she is feeling unwell. These five circumstances have been chosen because they are effective in combining issues of women's rights and consequences for women's health.

Table 16.7.1 shows that about two in three women agree to each of the reasons for a woman to refuse to have sexual relations with her husband, 38 percent agree with all of the given reasons, and 5 percent disagree with all of the reasons. The least acceptable reason for a wife to refuse sex with her husband is when she feels tired or not in the mood ( 65 percent). The most accepted reasons among women for refusing to have sex are if the wife has recently given birth ( 79 percent) and if the wife is feeling unwell ( 74 percent). Women age 15-19, women who are not employed, women with no children, women who live in rural areas, women with no education, and women in the poorest quintiles are the most likely to agree with none of the reasons for refusing sex. This indicates that these women are less empowered than other women.

| Table 16.7.1 Attitude toward refusing sexual intercourse with husband: Women |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of all women age 15-49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
| Wife is justified in refusing intercourse with her husband if she: |  |  |  |  |  |  |  |  |
| Background characteristic | Knows husband has a sexually transmitted disease | Knows husband has intercourse with other women | Has recently given birth | Is tired or not in the mood | Is feeling unwell | Percentage who agree with all of the specified reasons | Percentage who agree with none of the specified reasons | Number |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 63.2 | 69.2 | 73.6 | 66.3 | 75.0 | 36.8 | 6.7 | 1,274 |
| 20-24 | 67.4 | 69.1 | 79.6 | 67.5 | 76.5 | 38.1 | 4.7 | 1,046 |
| 25-29 | 70.7 | 67.5 | 82.8 | 68.1 | 76.9 | 41.0 | 4.7 | 729 |
| 30-34 | 69.3 | 66.9 | 79.3 | 62.3 | 71.5 | 39.2 | 4.6 | 616 |
| 35-39 | 67.9 | 65.4 | 80.1 | 63.3 | 73.2 | 38.2 | 5.2 | 503 |
| 40-44 | 64.5 | 65.2 | 79.1 | 57.1 | 67.8 | 31.6 | 5.6 | 438 |
| 45-49 | 66.7 | 63.0 | 81.6 | 62.7 | 72.7 | 34.5 | 4.4 | 383 |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |
| Not employed | 65.7 | 66.5 | 77.3 | 64.7 | 73.1 | 36.1 | 5.7 | 2,632 |
| Employed for cash | 67.8 | 68.5 | 81.2 | 65.7 | 75.1 | 39.7 | 5.1 | 2,072 |
| Employed not for cash | 67.6 | 69.6 | 67.1 | 62.9 | 77.9 | 29.7 | 2.1 | 106 |
| Missing | 69.5 | 67.7 | 77.0 | 61.2 | 77.2 | 36.6 | 4.3 | 177 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 66.9 | 69.5 | 77.8 | 68.6 | 76.5 | 40.2 | 5.4 | 2,487 |
| Married or living together | 66.8 | 65.4 | 79.2 | 61.0 | 72.1 | 34.8 | 5.3 | 2,062 |
| Divorced/separated/widowed | 66.2 | 65.3 | 80.7 | 62.8 | 71.2 | 34.7 | 5.0 | 438 |
| Number of living children |  |  |  |  |  |  |  |  |
| 0 | 66.5 | 70.2 | 74.6 | 68.0 | 76.4 | 39.3 | 6.1 | 1,601 |
| 1-2 | 68.0 | 68.1 | 81.7 | 66.6 | 76.4 | 38.8 | 4.2 | 1,754 |
| 3-4 | 68.7 | 65.1 | 79.9 | 62.2 | 71.1 | 36.2 | 5.5 | 887 |
| 5+ | 62.4 | 62.7 | 78.6 | 57.7 | 67.9 | 31.8 | 5.8 | 745 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 71.8 | 69.6 | 81.6 | 71.7 | 78.7 | 42.6 | 3.0 | 1,330 |
| Rural | 64.9 | 66.6 | 77.6 | 62.5 | 72.5 | 35.6 | 6.1 | 3,657 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 66.7 | 67.5 | 76.4 | 59.9 | 70.7 | 36.5 | 6.6 | 1,340 |
| Manzini | 67.6 | 67.1 | 80.5 | 69.1 | 76.2 | 40.0 | 5.0 | 1,647 |
| Shiselweni | 65.4 | 68.3 | 78.5 | 64.2 | 72.8 | 38.4 | 6.2 | 1,033 |
| Lubombo | 67.0 | 67.0 | 78.8 | 65.6 | 77.1 | 33.7 | 3.0 | 966 |
| Education |  |  |  |  |  |  |  |  |
| No education | 65.4 | 65.0 | 77.7 | 63.8 | 73.4 | 35.2 | 6.3 | 884 |
| Lower primary | 65.7 | 69.7 | 80.5 | 65.6 | 77.4 | 37.2 | 4.5 | 525 |
| Higher primary | 63.8 | 65.5 | 76.1 | 60.5 | 71.2 | 34.1 | 6.2 | 1,167 |
| Secondary | 67.0 | 66.3 | 79.1 | 66.2 | 74.3 | 37.6 | 5.2 | 1,220 |
| High school | 69.7 | 69.5 | 78.2 | 63.8 | 72.3 | 39.8 | 5.1 | 803 |
| Tertiary | 73.8 | 74.8 | 85.7 | 78.0 | 84.2 | 48.5 | 2.4 | 387 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 59.6 | 60.8 | 75.5 | 58.7 | 70.3 | 30.3 | 6.3 | 785 |
| Second | 63.1 | 65.0 | 77.2 | 60.0 | 72.3 | 33.4 | 7.1 | 862 |
| Middle | 65.2 | 66.3 | 76.8 | 62.9 | 70.5 | 37.5 | 6.6 | 968 |
| Fourth | 68.9 | 70.4 | 78.8 | 66.4 | 75.1 | 39.3 | 5.3 | 1,111 |
| Highest | 73.1 | 71.5 | 82.9 | 72.5 | 79.9 | 43.2 | 2.4 | 1,262 |
| Total | 66.8 | 67.4 | 78.7 | 64.9 | 74.2 | 37.5 | 5.3 | 4,987 |

Table 16.7.2 shows that men tend to differ somewhat from women in their opinions regarding women refusing sex. According to men, the most accepted reasons for a wife to refuse to have sex with her husband are if the wife knows that her husband has a sexually transmitted disease ( 74 percent) or if the wife feels tired or not in the mood ( 73 percent). Men are less likely to agree that a wife is justified in refusing to have sex with her husband when the wife knows that her husband has intercourse with other women (63 percent). This is because although polygyny is slowly declining in Swaziland, some Swazi men still believe that it is acceptable for a man to have multiple partners. Eight percent of men do not agree with any of the reasons justifying a wife refusing to have sex with her husband.

Table 16.7.2 Attitude toward refusing sexual intercourse with husband: Men
Percentage of all men age 15-49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Swaziland 2006-07

| Background characteristic | Wife is justified in refusing intercourse with her husband if she: |  |  | Percentage who agree with all of the specified reasons | Percentage who agree with none of the specified reasons | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Knows husband has a sexually transmitted disease | Knows husband has intercourse with other women | Is tired or not in the mood |  |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 70.1 | 65.3 | 70.2 | 42.1 | 8.6 | 1,323 |
| 20-24 | 73.1 | 62.2 | 74.4 | 44.4 | 8.3 | 886 |
| 25-29 | 78.0 | 63.6 | 75.5 | 46.5 | 5.4 | 624 |
| 30-34 | 78.5 | 57.3 | 71.4 | 42.9 | 9.1 | 431 |
| 35-39 | 79.3 | 66.6 | 77.0 | 50.0 | 6.0 | 367 |
| 40-44 | 78.9 | 54.1 | 72.6 | 39.5 | 9.0 | 269 |
| 45-49 | 73.2 | 60.1 | 75.9 | 45.3 | 9.5 | 256 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 72.5 | 65.6 | 72.1 | 45.0 | 8.2 | 1,833 |
| Employed for cash | 77.0 | 60.7 | 74.4 | 44.3 | 7.5 | 2,114 |
| Employed not for cash | 62.9 | 56.3 | 69.7 | 33.6 | 11.1 | 201 |
| Marital status |  |  |  |  |  |  |
| Never married | 72.5 | 63.7 | 72.5 | 43.5 | 8.4 | 2,734 |
| Married or living together | 78.1 | 61.2 | 74.6 | 45.5 | 7.0 | 1,219 |
| Divorced/separated/widowed | 77.4 | 56.8 | 73.2 | 42.7 | 7.5 | 203 |
| Number of living children |  |  |  |  |  |  |
| 0 | 71.6 | 64.0 | 71.7 | 43.2 | 8.5 | 2,500 |
| 1-2 | 77.8 | 61.4 | 76.2 | 46.3 | 7.3 | 835 |
| 3-4 | 79.7 | 59.3 | 75.2 | 44.7 | 5.4 | 424 |
| 5+ | 78.7 | 60.3 | 73.2 | 44.2 | 8.5 | 397 |
| Residence |  |  |  |  |  |  |
| Urban | 77.0 | 63.2 | 74.8 | 45.9 | 7.1 | 1,181 |
| Rural | 73.3 | 62.4 | 72.5 | 43.3 | 8.3 | 2,975 |
| Region |  |  |  |  |  |  |
| Hhohho | 74.0 | 63.8 | 74.1 | 44.3 | 7.5 | 1,099 |
| Manzini | 76.1 | 63.5 | 73.2 | 45.7 | 7.2 | 1,349 |
| Shiselweni | 72.0 | 64.6 | 72.8 | 44.0 | 9.0 | 843 |
| Lubombo | 74.4 | 57.9 | 72.1 | 41.3 | 8.8 | 865 |
| Education |  |  |  |  |  |  |
| No education | 73.1 | 58.2 | 72.6 | 41.0 | 9.6 | 316 |
| Lower primary | 66.7 | 54.6 | 65.1 | 33.9 | 13.3 | 470 |
| Higher primary | 71.4 | 57.5 | 67.8 | 37.7 | 9.6 | 980 |
| Secondary | 73.2 | 66.5 | 74.6 | 46.0 | 6.9 | 1,191 |
| High school | 81.7 | 66.8 | 79.8 | 52.3 | 4.8 | 852 |
| Tertiary | 80.4 | 68.5 | 78.1 | 51.7 | 6.0 | 347 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 67.6 | 59.5 | 68.8 | 37.6 | 9.9 | 601 |
| Second | 75.2 | 63.8 | 74.5 | 45.4 | 8.0 | 665 |
| Middle | 75.2 | 59.6 | 72.8 | 43.8 | 8.9 | 856 |
| Fourth | 73.7 | 62.0 | 72.8 | 43.3 | 7.7 | 953 |
| Highest | 77.5 | 66.6 | 75.2 | 47.8 | 6.3 | 1,081 |
| Total 15-49 | 74.4 | 62.6 | 73.1 | 44.1 | 8.0 | 4,156 |
| Note: Total includes eight men with information missing on employment. |  |  |  |  |  |  |

There are small differences by background characteristics in the proportion of men who agree with all of the reasons for a wife to refuse sex. However, unemployed men and men who are employed but receive no cash payment, better educated men, and men who are in the wealthiest households are more likely to agree with all of the reasons for refusing sex.

### 16.5 WOMEN's Empowerment Indicators

The three sets of empowerment indicators, namely women's participation in making household decisions, their attitude toward wife beating, and their attitude toward a wife's right to refuse sexual intercourse with her husband/partner, can be summarized into three separate indices. The first index shows the number of decisions (see Table 16.4 for the list of decisions) in which women participate alone or jointly with their husband/partner. This index ranges in value from 0 to 4 and is positively related to women's empowerment. It reflects the degree of decisionmaking control that women are able to exercise in areas that affect their own lives and environments.

The second index, which ranges in value from 0 to 6 , is the total number of reasons (see Table 16.6.1 for the list of reasons) for which the respondent feels that a husband is justified in beating his wife. A lower score on this indicator is interpreted as reflecting a greater sense of entitlement and self-esteem and a higher status of women.

The final index, which ranges in value from 0 to 5 , is the number of circumstances (see Table 16.7.1 for the list of the circumstances) in which the respondent feels that a woman is justified in refusing sexual intercourse with her husband or partner. This indicator reflects perceptions of sexual roles and women's rights over their bodies and relates positively to women's sense of self and empowerment.

Table 16.8 shows how these three indicators relate to each other. In general, the expectation is that women who participate in making household decisions are also more likely to have egalitarian gender beliefs. Greater decisionmaking participation is normally associated with disapproval of wife beating and vice versa. Data in Table 16.8 show that women who participate in 3-4 decisions are more likely than other women to disagree with wife beating and to agree with the woman's right to refuse sex with her husband.

The second panel in Table 16.8 shows that participation in making household decisions declines as the number of justifications for wife beating increases. In general, disapproval of wife beating is associated with agreement of a woman's right to refuse sex with her husband.

Decisionmaking participation is also usually associated with agreement that there is no justification for wife beating and that a wife can refuse sex with her husband. It is surprising, however, that almost the same percentage of women participate in all four decisions ( 40 percent) as agree that a woman may refuse to have sex with her husband for one or more reasons ( 37 percent and lower). The majority of women are against wife beating regardless of their stand on a woman's right to refuse sex with her husband.

Table 16.8 Indicators of women's empowerment
Percentage of women age 15-49 who participate in all decisionmaking, percentage who disagree with all reasons for justifying wife beating, and percentage who agree with all reasons for refusing sexual intercourse with husband, by value on each of the indicators of women's empowerment, Swaziland 2006-07

| Empowerment indicator | Currently married women |  | Percentage who disagree with all the reasons justifying wife beating | Percentage who agree with all the reasons for refusing sexual intercourse with husband | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who participate in all decisionmaking | Number of women |  |  |  |
| Number of decisions in which women participate ${ }^{1}$ |  |  |  |  |  |
| 0 | 0.0 | 219 | 61.7 | 33.8 | 219 |
| 1-2 | 0.0 | 612 | 59.0 | 30.6 | 612 |
| 3-4 | 59.7 | 1,231 | 70.2 | 37.1 | 1,231 |
| Number of reasons for which wife beating is justified ${ }^{2}$ |  |  |  |  |  |
| 0 | 40.0 | 1,361 | 100.0 | 38.4 | 3,095 |
| 1-2 | 30.2 | 527 | 0.0 | 35.9 | 1,361 |
| 3-4 | 17.9 | 133 | 0.0 | 37.4 | 437 |
| 5-6 | 18.4 | 41 | 0.0 | 32.2 | 94 |
| Number of reasons given for refusing to have sexual intercourse with husband ${ }^{3}$ |  |  |  |  |  |
| 0 | 37.0 | 108 | 61.2 | 0.0 | 264 |
| 1-2 | 26.5 | 443 | 58.8 | 0.0 | 968 |
| 3-4 | 36.4 | 792 | 62.4 | 0.0 | 1,885 |
| 5 | 40.2 | 718 | 63.5 | 100.0 | 1,870 |

[^24]
### 16.6 Current Use of Contraception by Women's Status

Table 16.9 shows the distribution of currently married women by contraceptive method use, according to the three empowerment indicators. The data indicate that there is a positive relationship between women's status and use of contraception. Contraceptive use is highest among women who participate in 3-4 household decisions (53 percent), who agree with none of the reasons justifying wife beating ( 54 percent), and who believe that a wife can refuse sexual intercourse with her partner for all of the five specified reasons (55 percent).

Table 16.9 Current use of contraception by women's status
Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Swaziland 2006-07

| Empowerment indicator | Any method |  | Modern methods |  |  |  | Any traditional method | Not currently using | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Female sterilization | Male sterilization | Temporary modern female methods ${ }^{1}$ | Male condom |  |  |  |  |
| Number of decisions in which women participate ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| 0 | 51.0 | 47.5 | 3.1 | 0.0 | 29.4 | 15.0 | 3.5 | 49.0 | 100.0 | 219 |
| 1-2 | 46.2 | 42.7 | 4.8 | 0.2 | 27.9 | 9.8 | 3.5 | 53.8 | 100.0 | 612 |
| 3-4 | 52.8 | 50.2 | 6.7 | 0.2 | 30.5 | 12.8 | 2.6 | 47.2 | 100.0 | 1,231 |
| Number of reasons for which wife beating is justified ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |
| 0 | 53.7 | 50.4 | 6.6 | 0.3 | 30.2 | 13.3 | 3.3 | 46.3 | 100.0 | 1,361 |
| 1-2 | 45.6 | 43.5 | 4.9 | 0.0 | 28.1 | 10.5 | 2.1 | 54.4 | 100.0 | 527 |
| 3-4 | 43.1 | 40.2 | 2.9 | 0.0 | 30.0 | 7.3 | 2.9 | 56.9 | 100.0 | 133 |
| 5-6 | (40.0) | (37.4) | (0.0) | (0.0) | (28.6) | (8.8) | (2.5) | (60.0) | 100.0 | 41 |
| Number of reasons given for refusing to have sexual intercourse with husband ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |
| 0 | 49.0 | 44.0 | 6.7 | 0.0 | 28.2 | 9.1 | 5.0 | 51.0 | 100.0 | 108 |
| 1-2 | 50.6 | 46.8 | 4.4 | 0.0 | 31.0 | 11.5 | 3.8 | 49.4 | 100.0 | 443 |
| 3-4 | 47.1 | 45.4 | 6.4 | 0.3 | 27.4 | 11.3 | 1.7 | 52.9 | 100.0 | 792 |
| 5 | 54.8 | 51.4 | 5.8 | 0.2 | 31.4 | 14.0 | 3.4 | 45.2 | 100.0 | 718 |
| Total | 50.6 | 47.7 | 5.8 | 0.2 | 29.6 | 12.2 | 2.9 | 49.4 | 100.0 | 2,062 |

Note: If more than one method is used, only the most effective method is considered in this tabulation. Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Pill, IUD, injectables, implants, female condom, diaphragm, foam/jelly, and lactational amenorrhoea method
${ }^{2}$ The decisions are: own health care, making major household purchases, making purchases for daily household needs, and visits to her family or relatives.
${ }^{3}$ The reasons are: burns the food, argues with him, goes out with telling him, neglects the children, and refuses to have sexual intercourse with him.
${ }^{4}$ The reasons are: knows husband has sexually transmitted disease, knows husband has intercourse with other women, and is tired or not in the mood.

### 16.7 Ideal Family Size and Unmet Need By Women's Status

Table 16.10 shows how women's ideal family size and their unmet need for family planning vary by women's status indicators. The data indicate that unmet need for family planning is lowest for women who participate in most household decisionmaking, although there is no clear pattern in the relationship between the number of decisions a woman participates in and her unmet need for family planning. Table 16.10 shows that unmet need for family planning increases with the number of reasons for wife beating a woman agrees with. Interestingly, the data indicate that unmet need for family planning is lowest among women who agreed with none of the specified reasons that a wife can refuse sex with her husband.

| Mean ideal number of children for women age 15-49 and the percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Swaziland 2006-07 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean ideal |  | Perce marrie u fa | age of cur women w et need for ly plannin | ently ith an r $g^{2}$ |  |
| Empowerment indicator | number of children ${ }^{1}$ | Number of women | For spacing | For limiting | Total | Number of women |
| Number of decisions in which women participate ${ }^{3}$ |  |  |  |  |  |  |
| 0 | 2.7 | 214 | 6.3 | 19.0 | 25.3 | 219 |
| 1-2 | 2.9 | 606 | 10.6 | 19.3 | 29.9 | 612 |
| 3-4 | 2.7 | 1,221 | 6.0 | 14.9 | 20.9 | 1,231 |
| Number of reasons for which wife beating is justified ${ }^{4}$ |  |  |  |  |  |  |
| 0 | 2.5 | 3,068 | 6.1 | 15.7 | 21.8 | 1,361 |
| 1-2 | 2.6 | 1,354 | 9.2 | 18.8 | 28.0 | 527 |
| 3-4 | 2.5 | 436 | 12.7 | 18.1 | 30.9 | 133 |
| 5-6 | 2.9 | 94 | (8.0) | (16.4) | (24.4) | 41 |
| Number of reasons given for refusing to have sexual intercourse with husband ${ }^{5}$ |  |  |  |  |  |  |
| 0 | 2.6 | 264 | 5.4 | 14.0 | 19.4 | 108 |
| 1-2 | 2.7 | 956 | 8.9 | 17.4 | 26.3 | 443 |
| 3-4 | 2.5 | 1,870 | 8.1 | 17.1 | 25.2 | 792 |
| 5 | 2.4 | 1,861 | 5.9 | 16.1 | 22.0 | 718 |
| Total | 2.5 | 4,951 | 7.4 | 16.7 | 24.0 | 2,062 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. <br> ${ }^{1}$ Mean excludes respondents who gave non-numeric responses. |  |  |  |  |  |  |
| ${ }^{3}$ Restricted to currently married women. The decisions are: own health care, making major household purchases, making purchases for daily household needs, and visits to her family or relatives. |  |  |  |  |  |  |
| ${ }^{4}$ The reasons are: burns the food, argues with him, goes out with telling him, neglects the children, and refuses to have sexual intercourse with him. |  |  |  |  |  |  |
| ${ }^{5}$ The reasons are: knows husband has sexually transmitted disease, knows husband has intercourse with other women, and is tired or not in the mood. |  |  |  |  |  |  |

### 16.8 Women's Status and Reproductive Health Care

Table 16.11 indicates that there are no differences in access to antenatal care by women's empowerment status. However, women who participate in 3-4 decisions are more likely to receive assistance from health personnel during delivery than women who have no say in decisionmaking ( 77 percent and 67 percent, respectively). Similarly, women who agreed with all five reasons for refusing intercourse with a husband are the least likely to seek delivery assistance from health personnel than women who agreed with none of the specified reasons (78 percent and 73 percent, respectively).

Although the proportion of women who received postnatal care within the first two days after delivery is generally low, it is highest among women who participate in 3-4 decisions (27 percent), and among women who agreed with all five reasons for refusing intercourse with a husband ( 27 percent).

Table 16.11 Reproductive health care by women's empowerment
Percentage of women age 15-49 with a live birth in the five years preceding the survey who received antenatal care, delivery assistance, and postnatal care from health personnel for the most recent birth, by indicators of women's empowerment, Swaziland 2006-07

| Empowerment indicator | Received antenatal care from health personnel ${ }^{1}$ | Received delivery assistance from health personnel | Received postnatal care from health personnel within the first two days of delivery | Number of women with a child born in the past five years |
| :---: | :---: | :---: | :---: | :---: |
| Number of decisions in which women participate ${ }^{2}$ |  |  |  |  |
| 0 | 94.5 | 67.4 | 21.6 | 137 |
| 1-2 | 97.8 | 73.8 | 20.6 | 387 |
| 3-4 | 97.7 | 76.6 | 26.7 | 661 |
| Number of reasons for which wife beating is justified ${ }^{3}$ |  |  |  |  |
| 0 | 97.4 | 78.0 | 23.6 | 1,309 |
| 1-2 | 96.0 | 73.4 | 19.0 | 611 |
| 3-4 | 97.7 | 66.7 | 19.8 | 169 |
| 5-6 | (100.0) | 72.9 | 25.2 | 45 |
| Number of reasons given for refusing to have sexual intercourse with husband ${ }^{4}$ |  |  |  |  |
| 0 | 97.5 | 66.5 | 24.6 | 112 |
| 1-2 | 97.1 | 67.7 | 16.7 | 434 |
| 3-4 | 97.0 | 77.1 | 19.7 | 812 |
| 5 | 97.0 | 79.9 | 27.1 | 776 |
| Total | 97.1 | 75.6 | 22.1 | 2,134 |

Note: "Health personnel" includes doctor, nurse, midwife, or nursing assistant. Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Includes deliveries in a health facility and not in a health facility
${ }^{2}$ Restricted to currently married women. The decisions are: own health care, making major household purchases, making purchases for daily household needs, and visits to her family or relatives.
${ }^{3}$ The reasons are: burns the food, argues with him, goes out with telling him, neglects the children, and refuses to have sexual intercourse with him.
${ }^{4}$ The reasons are: knows husband has sexually transmitted disease, knows husband has intercourse with other women, and is tired or not in the mood.

### 16.9 Early Childhood Mortality Rates by Women's Status

Empowerment is a woman's ability to access information, make decisions, and act effectively in their own interest or in the interest of those who depend on them. It follows that if women, who are primary caretakers of children, are empowered, the health and survival of their children will be enhanced.

Table 16.12 shows information on the impact of women's empowerment on infant and child mortality. Surprisingly, the data show that women who have no final say in any decision in the household have a lower infant mortality rate than those who have a say in five decisions ( 28 deaths per 1,000 live births compared with 38 deaths per 1,000 live births). Also worth noting is that infant mortality rates are highest for children whose mothers participate in 1-2 and 3-4 of the specified decisions (99 and 74 deaths per 1,000 live births, respectively).

In general, there is no clear pattern in the relationship between the indicators of women's empowerment and infant and under-five mortality. However, child mortality (deaths among children age 1-4 years) is highest among women who have the lowest status, as measured by each of the three empowerment indicators. Deaths among children whose mothers participate in household decisionmaking decreases steadily as mothers have greater decisionmaking authority. For example, the level of child mortality among children whose mothers participate in $1-2$ decisions is 33 deaths per $1,000,{ }^{1}$ declining to 26 deaths per 1,000 for children whose mothers participate in 3-4 decisions and further declining to 21 deaths per 1,000 for children whose mothers participate in all five specified household decisions. A similar pattern is noted for child mortality by mother's right to refuse to have sex with her husband. Children whose mothers agreed to none of the specified reasons for a wife refusing sex with her husband have a mortality rate of 44 deaths per 1,000 live births, compared with 25 deaths per 1,000 live births for children whose mothers agreed to all five reasons for a wife to refuse having sex with her husband.

| Table 16.12 Early childhood mortality rates by women's status |
| :--- | :--- | :--- | :--- |
| Infant, child, and under-five mortality rates for the 10-year period preceding |
| the survey, by indicators of women's status, Swaziland 2006-07 |

[^25]
#### Abstract

Amos Zwane The HIV/AIDS epidemic has led to an increasing number of orphaned and vulnerable children in Swaziland. Traditional ways of caring for orphaned and vulnerable children are being eroded by the impact of HIV/AIDS. This poses challenges to communities, to find solutions to the problem of the everincreasing number of children and families left vulnerable by HIV/AIDS. For this reason, the 2006-07 SDHS sought to determine the number of OVCs and to assess the burden they pose for households in Swaziland.


In this chapter, an orphan is defined as a child below the age of 18 years with one or both parents dead. A vulnerable child is a child below the age of 18 years whose parent is very sick, or who lives in a household where an adult is very sick, or who lives in a household in which a very sick adult died in the 12 months preceding the survey. An adult is considered very sick if he/she is too ill to work or undertake other normal activities for a period of at least three months.

In reviewing the 2006-07 SDHS results, it is important to remember that the survey obtained information only for OVCs living in households. Children who are living in institutions or other nonhousehold settings are not included in the OVC results. Thus, the SDHS results should be considered as a minimum estimate of the problem of OVCs in Swaziland.

### 17.1 Children's Living Arrangements and Orphanhood

The household questionnaire collected information on living arrangements and parental survival status of children under age 18 in the households included in the SDHS sample. These data are presented by background characteristics in Table 17.1 for de jure children under age 18, i.e., for children under age 18 who were usual residents in the households selected for the SDHS sample. The table also includes information on the living arrangements and parental survival status for all de jure children under age 15.

The results in the table indicate that, in Swaziland, only 22 percent of children under age 18 are living in a household with both of their parents while about one-third are not living with either parent. Most children who are living with a single parent live with their mother (38 percent) rather than their father ( 6 percent). Orphanhood is common. Just under one in four children has lost one of their parents. Four percent of children under age 18 are double orphans, that is, both their parents are dead. Children are twice as likely to have lost their father as their mother (18 percent and 9 percent, respectively).

Children's living arrangements vary with several of the background characteristics in Table 17.1. For example, the percentage of children not living with either parent increases with age. On the other hand, Table 17.1 also shows that the sex is not a factor in children's living arrangements, with boys and girls equally likely to be living apart from their parents. Children from rural areas are more likely not to be living with parents than their counterparts in urban areas ( 36 percent and 24 percent, respectively). The percentage of children not living with either parent ranges from a high of 40 percent in the Shiselweni region to 31 percent in the Hhohho region.

Table 17.1 Children's living arrangements and orphanhood
Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, and the percentage of children not living with a biological parent, according to background characteristics, Swaziland 2006-07

| Background characteristic | Living with both parents | Living with mother but not father |  | Living with father but not mother |  | Not living with either parent |  |  |  |  |  | Percentage not living with a biological parent | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Only | Only |  | Information missing on |  |  |  |
|  |  | Father alive | Father dead |  |  | Mother alive | Mother dead | Both alive | father alive | mother alive | Both dead |  |  | father or mother | Total |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 25.3 | 46.8 | 2.8 | 2.6 | 0.3 | 17.1 | 1.5 | 2.0 | 0.4 | 1.3 | 100.0 | 22.3 | 3,219 |
| <2 | 25.7 | 60.2 | 2.1 | 0.7 | 0.0 | 8.9 | 0.8 | 0.4 | 0.1 | 1.2 | 100.0 | 11.3 | 1,265 |
| 2-4 | 25.1 | 38.1 | 3.2 | 3.7 | 0.4 | 22.4 | 1.9 | 3.1 | 0.6 | 1.3 | 100.0 | 29.4 | 1,953 |
| 5-9 | 22.1 | 28.6 | 7.9 | 4.7 | 1.2 | 21.0 | 3.4 | 6.0 | 2.9 | 2.2 | 100.0 | 35.6 | 3,149 |
| 10-14 | 20.1 | 22.3 | 10.5 | 5.1 | 2.4 | 18.3 | 4.5 | 7.2 | 7.5 | 2.1 | 100.0 | 39.7 | 3,369 |
| 15-17 | 19.1 | 18.0 | 12.4 | 4.0 | 2.6 | 19.0 | 4.5 | 8.2 | 8.3 | 3.8 | 100.0 | 43.8 | 1,752 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 21.9 | 30.0 | 8.0 | 4.5 | 1.6 | 18.3 | 3.4 | 5.7 | 4.3 | 2.4 | 100.0 | 34.1 | 5,746 |
| Female | 22.1 | 30.5 | 7.8 | 3.8 | 1.3 | 19.3 | 3.3 | 5.5 | 4.5 | 1.9 | 100.0 | 34.5 | 5,742 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 31.4 | 29.3 | 7.6 | 5.9 | 1.6 | 13.1 | 2.3 | 3.7 | 3.7 | 1.6 | 100.0 | 24.3 | 1,787 |
| Rural | 20.2 | 30.4 | 8.0 | 3.8 | 1.5 | 19.9 | 3.6 | 5.9 | 4.5 | 2.2 | 100.0 | 36.1 | 9,701 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 26.5 | 28.7 | 7.2 | 4.8 | 1.6 | 17.9 | 3.0 | 4.7 | 3.9 | 1.7 | 100.0 | 31.2 | 2,867 |
| Manzini | 20.6 | 31.9 | 8.3 | 4.3 | 1.8 | 18.2 | 3.4 | 5.9 | 3.9 | 1.8 | 100.0 | 33.2 | 3,419 |
| Shiselweni | 17.6 | 31.4 | 7.2 | 2.9 | 1.0 | 21.5 | 4.0 | 6.1 | 5.9 | 2.3 | 100.0 | 39.9 | 2,861 |
| Lubombo | 23.8 | 28.2 | 9.1 | 4.6 | 1.4 | 17.5 | 3.1 | 5.6 | 3.8 | 2.9 | 100.0 | 32.9 | 2,342 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 23.1 | 25.8 | 9.3 | 3.6 | 1.6 | 19.5 | 3.9 | 5.4 | 4.9 | 2.9 | 100.0 | 36.6 | 2,593 |
| Second | 19.1 | 30.6 | 8.9 | 3.3 | 1.4 | 19.7 | 3.3 | 6.5 | 4.8 | 2.4 | 100.0 | 36.7 | 2,555 |
| Middle | 19.1 | 34.1 | 8.8 | 3.4 | 1.2 | 18.2 | 3.6 | 5.8 | 3.9 | 1.9 | 100.0 | 33.4 | 2,399 |
| Fourth | 17.5 | 35.8 | 5.8 | 4.6 | 1.3 | 20.4 | 3.0 | 5.6 | 4.4 | 1.7 | 100.0 | 35.1 | 2,156 |
| Highest | 33.7 | 24.3 | 5.8 | 6.5 | 2.1 | 15.3 | 2.8 | 4.4 | 3.8 | 1.5 | 100.0 | 27.8 | 1,785 |
| Total <15 | 22.5 | 32.4 | 7.1 | 4.1 | 1.3 | 18.8 | 3.2 | 5.1 | 3.7 | 1.8 | 100.0 | 32.6 | 9,736 |
| Total <18 | 22.0 | 30.2 | 7.9 | 4.1 | 1.5 | 18.8 | 3.4 | 5.6 | 4.4 | 2.1 | 100.0 | 34.3 | 11,488 |

Note: Table is based on de jure household residents, i.e., usual members.

### 17.2 Orphans and Vulnerable Children

Orphanhood clearly represents a serious social, emotional, and economic burden for children. Children whose parents are ill for an extended period or who live in households where other adults suffer from chronic illness also can experience significant hardships, as serious illness may limit the resources available to feed, clothe, and educate a family's youngest members. Table 17.2 considers the prevalence of orphans and of children who are vulnerable because of the chronic illness of a parent or the chronic illness or recent death of a chronically ill adult in their household. The table presents these results for de jure children under age 18 by background characteristics and for the total population of de jure children under age 15 .

Overall, 23 percent of children under age 18 are orphans, and 12 percent are considered to be vulnerable children. Looking more closely at the factors contributing to a child's vulnerability, four percent of children under age 18 had a parent who was very sick, five percent lived in a household in which at least one adult (a parent or other household member) had been very sick, and six percent lived in a household where at least one adult had been very sick and died during the 12 months preceding the survey.

| Table 17.2 Orphans and vulnerable children (OVC) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of de jure children under age 18 years who are orphans or made vulnerable due to illness among adult household members, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |
|  |  | Percentage of children who: |  |  | Vulnerable children |  |  |
|  | Orphan children | Have a very | Live in a household where | Live in a household where at least 1 adult died in the past | Percentage of children who have a very sick parent OR live in a household | OVC children |  |
| Background characteristic | Percentage of children with one or both parents dead | for parent 3 months in the past 12 months $^{1}$ | has been very sick for at least 3 months in the past 12 months $^{2}$ | had been very sick for at least 3 months before he/she died ${ }^{2}$ | where an adult has been very sick OR died in the past 12 months (vulnerable children) | children who are orphans and/or vulnerable | Number of children |
| Age |  |  |  |  |  |  |  |
| 0-4 | 7.1 | 3.1 | 5.4 | 5.9 | 12.2 | 17.9 | 3,219 |
| .. $<2$ | 3.3 | 2.6 | 5.3 | 6.2 | 12.0 | 14.7 | 1,265 |
| ..2-4 | 9.6 | 3.4 | 5.5 | 5.6 | 12.4 | 19.9 | 1,953 |
| 5-9 | 22.0 | 4.0 | 5.4 | 5.6 | 11.9 | 29.7 | 3,149 |
| 10-14 | 32.7 | 3.6 | 4.6 | 5.8 | 11.4 | 39.1 | 3,369 |
| 15-17 | 37.0 | 3.4 | 5.1 | 4.8 | 10.6 | 42.6 | 1,752 |
| Sex |  |  |  |  |  |  |  |
| Male | 23.6 | 3.5 | 5.0 | 5.7 | 11.7 | 31.3 | 5,746 |
| Female | 22.9 | 3.6 | 5.3 | 5.5 | 11.6 | 31.0 | 5,742 |
| Residence |  |  |  |  |  |  |  |
| Urban | 19.1 | 2.0 | 3.1 | 2.1 | 5.7 | 22.9 | 1,787 |
| Rural | 24.0 | 3.8 | 5.5 | 6.2 | 12.8 | 32.6 | 9,701 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 20.6 | 2.7 | 4.1 | 4.5 | 9.4 | 27.2 | 2,867 |
| Manzini | 23.7 | 2.9 | 4.2 | 7.6 | 12.3 | 31.8 | 3,419 |
| Shiselweni | 25.0 | 2.6 | 5.0 | 5.9 | 11.0 | 32.3 | 2,861 |
| Lubombo | 23.6 | 6.7 | 8.0 | 3.7 | 14.2 | 33.6 | 2,342 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 25.6 | 6.5 | 8.1 | 7.6 | 16.9 | 36.8 | 2,593 |
| Second | 25.5 | 3.2 | 5.3 | 6.9 | 13.3 | 34.5 | 2,555 |
| Middle | 24.0 | 2.7 | 4.6 | 5.2 | 10.8 | 31.8 | 2,399 |
| Fourth | 20.4 | 2.9 | 4.4 | 4.9 | 10.0 | 27.2 | 2,156 |
| Highest | 19.0 | 1.8 | 2.3 | 2.2 | 4.9 | 21.8 | 1,785 |
| Total < 15 | 20.8 | 3.6 | 5.1 | 5.7 | 11.8 | 29.1 | 9,736 |
| Total <18 | 23.3 | 3.5 | 5.1 | 5.6 | 11.7 | 31.1 | 11,488 |

Note: Table is based only on children who usually live in the household. Very sick means person was too sick to work or do normal activities.
${ }^{1}$ Whether or not lives in same household as child
${ }^{2}$ Person age 18-59 years

Table 17.2 also shows that, taken together, three in ten children under age 18 in Swaziland are orphaned or vulnerable. The percentage of children who were orphaned or vulnerable increases rapidly with age, from 18 percent of children under 5 years to 43 percent of children in the age group 15-17 years. The table further illustrates that rural children are more likely to be orphaned and/or vulnerable than urban children ( 33 percent and 23 percent, respectively). The Lubombo region has the highest percentage of children orphaned or vulnerable ( 34 percent) while the Hhohho region has the lowest percentage ( 27 percent). The percentage of children who are orphaned or vulnerable decreases as the wealth quintile increases, from 37 percent among children in the lowest wealth quintile to 22 percent among those in the highest quintile.

### 17.3 Social and Economic Situation of Orphaned and Vulnerable Children

Information collected in the SDHS can be used to look at several important aspects of the social and economic situation of orphaned and vulnerable children, including information on school attendance, possession of items considered basic for meeting a child's material needs, residence with siblings, and nutritional status. These results provide a means for assessing the impact on children's welfare of the chronic illness and/or death of parents or other adult household members. The results also can assist in the monitoring and evaluating of OVC programmes (UNICEF, 2005).

### 17.3.1 School Attendance by Survivorship of Parents and OVC Status

Orphaned and vulnerable children may be at a greater risk of dropping out of school; this can be caused by lack of money to pay school fees or the need to stay at home to care for the sick parent or sibling. Table 17.3 considers school attendance rates among de jure children age 10-14 years by background characteristics. The first several columns of the table contrast the situation among the two groups of children at the extremes of the orphanhood continuum-children whose parents are both dead and children whose parents are both alive and the child is living with at least one parent. The final columns compare school attendance for the entire population of OVCs to that of children who are neither orphaned nor vulnerable.

## Table 17.3 School attendance by survivorship of parents and by OVC status

For de jure children 10-14 years of age, the percentage attending school by parental survival and by OVC status and the ratios of the percentages attending, by parental survival and OVC status, according to background characteristics, Swaziland 2006-07

| Background characteristic | Percentage attending school by survivorship of parents |  |  |  | Ratio ${ }^{1}$ | Percentage attending school by OVC status |  |  |  | Ratio ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Both parents dead | Number | Both parents alive and living with at least one parent | Number |  |  |  |  |  |  |
|  |  |  |  |  |  | OVC |  | Non | VC |  |
|  |  |  |  |  |  | Percentage | Number | Percentage | Number |  |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 94.7 | 122 | 91.6 | 788 | 1.03 | 92.6 | 615 | 90.5 | 1,027 | 1.02 |
| Female | 85.6 | 131 | 93.7 | 812 | 0.91 | 91.8 | 703 | 92.8 | 1,024 | 0.99 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | (87.8) | 32 | 95.8 | 257 | 0.92 | 91.5 | 156 | 93.0 | 318 | 0.98 |
| Rural | 90.3 | 221 | 92.1 | 1,343 | 0.98 | 92.2 | 1,162 | 91.3 | 1,733 | 1.01 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 90.5 | 64 | 93.6 | 413 | 0.97 | 93.6 | 290 | 93.3 | 532 | 1.00 |
| Manzini | 87.3 | 60 | 96.8 | 481 | 0.90 | 93.9 | 395 | 93.7 | 610 | 1.00 |
| Shiselweni | 87.8 | 96 | 85.2 | 374 | 1.03 | 89.6 | 354 | 85.0 | 507 | 1.05 |
| Lubombo | (100.0) | 33 | 93.9 | 332 | 1.07 | 91.4 | 279 | 94.4 | 402 | 0.97 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 91.2 | 66 | 85.6 | 322 | 1.07 | 92.0 | 343 | 87.2 | 410 | 1.06 |
| Second | 85.9 | 73 | 91.4 | 338 | 0.94 | 88.8 | 347 | 91.3 | 432 | 0.97 |
| Middle | (95.7) | 48 | 94.5 | 347 | 1.01 | 95.6 | 284 | 91.4 | 438 | 1.05 |
| Fourth | (89.2) | 31 | 95.8 | 311 | 0.93 | 92.5 | 197 | 93.2 | 425 | 0.99 |
| Highest | (89.0) | 36 | 96.6 | 282 | 0.92 | 93.5 | 147 | 95.5 | 346 | 0.98 |
| Total | 90.0 | 253 | 92.7 | 1,600 | 0.97 | 92.2 | 1,318 | 91.6 | 2,051 | 1.01 |

[^26]There is only a minor difference in school attendance according to the survivorship status of parents; 90 percent of children whose mother and father are dead are currently attending school compared with 93 of children whose parents are both alive and the child is living with at least one parent. The rate of school attendance among children who are orphaned and vulnerable is virtually identical to the rate of attendance among non-OVC children.

### 17.3.2 Basic Material Needs

The 2006-07 SDHS sought information on the availability of basic minimum material needs of the children. Children were considered to have their basic material needs met if they had a pair of shoes, two set of clothes, and at least one meal per day. The survey results in Table 17.4 show that these three basic material needs were met for 71 percent of all children age 5-17 years. The table also indicates that children were least likely to have a pair of shoes ( 73 percent) and most likely to have at least a meal a day (95 percent).

Table 17.4 Possession of basic material needs by orphans and vulnerable children
Among de jure children age 5-17 years, the percentage possessing three minimum basic material needs, ${ }^{1}$ the percentage of OVC and non-OVC who possess all three basic material needs, and the ratio of the percentage for OVC to the percentage for non OVC, according to background characteristics, Swaziland 2006-07

| Background characteristic | Among children 5-17 years of age percentage possessing: |  |  |  |  | Percentage possessing all three basic needs, by OVC status |  |  |  | Ratio ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Shoes | Two sets of clothes | At least one meal per day | All three basic needs | Number of children |  |  |  |  |  |
|  |  |  |  |  |  | OVC |  | Non OVC |  |  |
|  |  |  |  |  |  | Percentage | Number | Percentage | Number |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 5-9 | 71.2 | 84.6 | 94.1 | 69.2 | 3,149 | 56.2 | 936 | 74.6 | 2,213 | 0.75 |
| 10-14 | 72.1 | 86.6 | 96.8 | 69.7 | 3,369 | 59.7 | 1,318 | 76.2 | 2,051 | 0.78 |
| 15-17 | 79.0 | 88.2 | 94.0 | 77.0 | 1,752 | 69.7 | 747 | 82.4 | 1,006 | 0.85 |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 71.6 | 84.6 | 95.0 | 69.0 | 4,146 | 59.7 | 1,490 | 74.1 | 2,656 | 0.81 |
| Female | 74.8 | 87.8 | 95.4 | 73.1 | 4,124 | 62.4 | 1,511 | 79.3 | 2,613 | 0.79 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 87.1 | 91.7 | 95.0 | 86.2 | 1,233 | 76.5 | 351 | 90.1 | 881 | 0.85 |
| Rural | 70.8 | 85.2 | 95.2 | 68.4 | 7,037 | 59.0 | 2,649 | 74.0 | 4,388 | 0.80 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 76.0 | 87.1 | 94.5 | 74.8 | 2,031 | 63.7 | 649 | 80.1 | 1,382 | 0.79 |
| Manzini | 80.2 | 89.6 | 95.8 | 78.1 | 2,453 | 71.1 | 905 | 82.2 | 1,547 | 0.86 |
| Shiselweni | 67.1 | 83.4 | 96.0 | 63.9 | 2,083 | 53.0 | 777 | 70.3 | 1,306 | 0.75 |
| Lubombo | 67.4 | 83.6 | 94.3 | 65.2 | 1,703 | 54.4 | 669 | 72.1 | 1,034 | 0.75 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 49.7 | 74.8 | 93.6 | 46.3 | 1,848 | 38.6 | 781 | 51.9 | 1,067 | 0.74 |
| Second | 66.5 | 84.1 | 96.1 | 64.0 | 1,800 | 51.8 | 724 | 72.1 | 1,076 | 0.72 |
| Middle | 78.9 | 88.1 | 94.2 | 76.4 | 1,772 | 69.8 | 655 | 80.3 | 1,117 | 0.87 |
| Fourth | 86.1 | 92.5 | 96.7 | 84.6 | 1,555 | 79.9 | 486 | 86.7 | 1,069 | 0.92 |
| Highest | 93.0 | 95.1 | 95.9 | 92.7 | 1,294 | 87.8 | 355 | 94.6 | 939 | 0.93 |
| Total | 73.2 | 86.2 | 95.2 | 71.0 | 8,270 | 61.1 | 3,001 | 76.7 | 5,269 | 0.80 |

[^27]Boys are somewhat less likely than girls to have all three basic material needs met ( 69 percent and 73 percent, respectively). Children in rural areas are less likely to have all basic needs met compared with children in urban areas ( 68 percent and 86 percent, respectively). Children in the highest wealth quintile were twice as likely as children in the lowest quintile to have all basic needs met.

The table further shows that OVCs are less likely to have basic material needs met than non-OVCs (61 percent and 77 percent, respectively). Examining the ratio of the percentage of children with basic needs met shows that the inequalities between OVCs and nonOVCs are greater among children age 5-9 years and children age 10-14 years than among children age 15-17 years. The gap between OVCs and non-OVCs is also less for urban children and children living in Manzini than for other children. The gap between OVCs and nonOVCs with respect to the possession of basic material needs decreases with wealth.

### 17.4 Orphans Not Living with Siblings

Sibling interrelationships may be very close in situations where a parent dies, and maintaining these relationships can be helpful for children dealing with the loss of a parent. Table 17.5 presents information on the proportion of orphans under the age of 18 with one or more siblings also under age 18 who are not living with all of these other siblings.

Around three in ten orphans under the age of 18 are not living with all their siblings under the age of 18 years. The likelihood that an orphan is not living with all of his or her siblings increases with age. Maternal orphans are more likely to live apart from their siblings than paternal orphans or double orphans, i.e., children whose mother and father are both deceased. Urban orphans are somewhat more likely to be living apart from their siblings than rural orphans. The Shiselweni

| Among orphans under age 18 years who have one or more siblings under age 18 years, the percentage who do not live with all their siblings under age 18 , by background characteristics, Swaziland 2006-07 |  |  |
| :---: | :---: | :---: |
| Background characteristic | Percentage of orphans not living with all siblings | Number of orphans with one or more siblings |
| Age |  |  |
| 0-4 | 21.2 | 127 |
| 5-9 | 20.8 | 450 |
| 10-14 | 30.7 | 755 |
| 15-17 | 36.7 | 430 |
| Sex |  |  |
| Male | 29.2 | 870 |
| Female | 28.7 | 891 |
| Orphanhood status |  |  |
| Maternal orphan | 35.4 | 370 |
| Paternal orphan | 23.9 | 1,087 |
| Both parents dead | 39.0 | 304 |
| Residence |  |  |
| Urban | 34.3 | 191 |
| Rural | 28.3 | 1,570 |
| Region |  |  |
| Hhohho | 33.0 | 362 |
| Manzini | 30.0 | 534 |
| Shiselweni | 21.4 | 497 |
| Lubombo | 33.6 | 368 |
| Wealth quintile |  |  |
| Lowest | 24.7 | 451 |
| Second | 25.2 | 443 |
| Middle | 25.4 | 399 |
| Fourth | 35.2 | 275 |
| Highest | 45.9 | 193 |
| Total | 29.0 | 1,761 |

Note: Table is based only on children who usually live in the household. region has the lowest percentage of orphans less than 18 years of age living away from other siblings (21 percent). Orphans in the highest wealth quintile are more than twice as likely as those in the lowest quintile to live apart from their siblings.

### 17.5 Underweight Orphans and Vulnerable Children

Table 17.6 shows the nutritional status of children under five years of age according to orphanhood status. The results indicate that OVCs are disadvantaged as compared to non-OVCs in terms of nutrition status. Overall, 11 percent of OVCs were underweight as compared with seven percent of non-OVCs. An examination of the ratios of the percentage underweight among OVCs compared with non- OVCs indicates that, overall, the small numbers of urban OVCs and OVCs in the highest wealth quintile are the most disadvantaged compared to non-OVCs. The likelihood that OVCs are disadvantaged increases with age. OVCs are more likely to be disadvantaged compared with non-OVCs if they are girls than if they are boys and if they live in Shiselweni and Lubombo than if they live in Manzini and Hhohho.

| Table 17.6 Underweight orphans and vulnerable children |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of de jure children under age five years who slept in the household the night before who are underweight, total and by OVC status, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |
| Background characteristic | Percentage of children under 5 who are underweight ${ }^{1}$ | Number of children | Underweight by OVC status |  |  |  | Ratio ${ }^{2}$ |
|  |  |  | OVC |  | Non OVC |  |  |
|  |  |  | Percentage underweight ${ }^{1}$ | Number of OVC | Percentage underweight | Number of non OVC |  |
| Age |  |  |  |  |  |  |  |
| < 1 year | 3.8 | 514 | 3.3 | 67 | 3.9 | 446 | 0.84 |
| 1-2 years | 10.2 | 1,135 | 14.8 | 186 | 9.3 | 948 | 1.59 |
| 3-4 years | 6.7 | 1,210 | 9.9 | 255 | 5.9 | 955 | 1.69 |
| Sex |  |  |  |  |  |  |  |
| Male | 7.3 | 1,421 | 8.8 | 274 | 7.0 | 1,147 | 1.25 |
| Female | 7.8 | 1,437 | 13.2 | 235 | 6.8 | 1,203 | 1.94 |
| Residence |  |  |  |  |  |  |  |
| Urban | 4.5 | 466 | 17.0 | 50 | 3.0 | 416 | 5.67 |
| Rural | 8.2 | 2,393 | 10.1 | 458 | 7.7 | 1,934 | 1.31 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 8.9 | 736 | 11.9 | 118 | 8.3 | 617 | 1.44 |
| Manzini | 7.6 | 851 | 10.1 | 156 | 7.1 | 695 | 1.43 |
| Shiselweni | 7.7 | 727 | 12.0 | 135 | 6.7 | 591 | 1.78 |
| Lubombo | 5.6 | 545 | 9.0 | 99 | 4.8 | 447 | 1.86 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 11.2 | 675 | 14.9 | 163 | 10.0 | 512 | 1.49 |
| Second | 7.8 | 679 | 10.8 | 125 | 7.2 | 554 | 1.50 |
| Middle | 6.7 | 560 | 7.6 | 99 | 6.5 | 461 | 1.16 |
| Fourth | 6.6 | 527 | 7.6 | 92 | 6.3 | 435 | 1.20 |
| Highest | 3.8 | 417 | (9.2) | 29 | 3.4 | 388 | 2.73 |
| Total | 7.6 | 2,859 | 10.8 | 509 | 6.9 | 2,350 | 1.57 |

Note: Table is based only on children who usually live in the household and who also slept in the household the night preceding the interview. Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Two or more standard deviations below mean on the WHO Child Growth Standards for weight for age
${ }^{2}$ Ratio of the percentage for OVC to the percentage for non OVC

### 17.6 Early Sexual INTERCOURSE

Orphaned or vulnerable children may be exposed to greater risks of sexual abuse and exploitation than non-OVCs. In particular, girls may be forced into the sex trade in exchange for shelter and protection, due to lack of adult or family guidance to help them protect themselves.

Table 17.7 shows the percentage of children who have had sexual intercourse before the age of 15 according to OVC status. The table shows that early sexual intercourse is more frequent among girls if they are OVCs than if they are non-OVCs. Among boys, however, the pattern is reversed. The ratio of the percentage of OVCs to the percentage of non-OVCs is

Table 17.7 Sexual intercourse before age 15 by OVC status
Percentage of de jure children age 15-17 who had sexual intercourse before exact age 15 by OVC status, and ratio of the percentage for OVC to the percentage for non OVC by OVC status, according to sex, Swaziland 2006-07

|  | Women |  |  | Men |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Percentage <br> who had sexual <br> intercourse <br> before exact <br> age 15 | Number of <br> women | Percentage <br> who had sexual <br> intercourse <br> before exact <br> age 15 | Number of <br> OVen |  |
| OVC | 9.0 | 323 |  | 4.2 | 352 |
| Non-OVC | 6.4 | 440 |  | 5.4 | 504 |
| Total | 7.5 | 763 |  | 4.9 | 856 |
| Ratio $^{1}$ | 1.39 | na | 0.77 | na |  |

Note: Table is based only on children who usually live in the household and who also slept in the household the night preceding the interview. na $=$ Non applicable
${ }^{1}$ Ratio of the percentage for OVC to the percentage for non OVC

### 17.7 Succession Planning

Succession planning is important to make sure that children will continue to get suitable care and support if the primary caregiver dies. Identifying someone who will be responsible for a child if the primary caregiver dies or falls ill is one way to ensure a better future for children.

Table 17.8 shows the percentage of women and men age 15-49 who are primary caregivers of children under 18 years. The table shows that, in Swaziland, 53 percent of women and men report that they are primary caregivers. Among the caregivers, 27 percent indicate that they have made succession plans. Male caregivers are more likely to report succession planning than female caregivers. Caregivers in urban areas are more likely to have made succession plans than those in rural areas. Caregivers in the Shiselweni region are the least likely and caregivers in the Manzini region are the most likely to undertake succession planning. The table further shows that increased education and wealth positively influence succession planning.

| Table 17.8 Succession planning |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of de facto women and men age 15-49 who are the primary caregivers of children under age 18 years, and among the primary caregivers, the percentage who have made arrangements for someone else to care for the children in the event of their own inability to do so due to illness or death, by background characteristics, Swaziland 2006-07 |  |  |  |  |
| Background characteristic | Percentage of women and men who are primary caregivers | Number of women and men 15-49 | Percentage of caregivers who have made succession arrangements | Number of primary caregivers |
| Age |  |  |  |  |
| 15-19 | 9.1 | 2,596 | 36.1 | 236 |
| 20-29 | 53.9 | 3,285 | 28.6 | 1,771 |
| 30-39 | 87.6 | 1,917 | 25.5 | 1,679 |
| 40-49 | 87.4 | 1,345 | 25.7 | 1,176 |
| Sex |  |  |  |  |
| Men | 42.2 | 4,156 | 32.3 | 1,752 |
| Women | 62.4 | 4,987 | 24.3 | 3,111 |
| Residence |  |  |  |  |
| Urban | 59.2 | 2,511 | 34.3 | 1,487 |
| Rural | 50.9 | 6,632 | 24.1 | 3,375 |
| Region |  |  |  |  |
| Hhohho | 56.5 | 2,440 | 27.0 | 1,379 |
| Manzini | 52.4 | 2,996 | 30.1 | 1,571 |
| Shiselweni | 48.5 | 1,877 | 22.4 | 910 |
| Lubombo | 54.8 | 1,831 | 27.3 | 1,003 |
| Education |  |  |  |  |
| No education | 67.6 | 719 | 19.4 | 486 |
| Lower primary | 53.2 | 830 | 21.8 | 441 |
| Higher primary | 49.9 | 2,249 | 22.8 | 1,122 |
| Secondary | 47.7 | 2,883 | 25.8 | 1,377 |
| High school | 52.5 | 1,746 | 30.0 | 917 |
| Tertiary | 72.5 | 717 | 47.3 | 520 |
| Wealth quintile |  |  |  |  |
| Lowest | 53.8 | 1,386 | 17.7 | 746 |
| Second | 51.3 | 1,527 | 21.5 | 784 |
| Middle | 50.8 | 1,824 | 26.6 | 927 |
| Fourth | 51.7 | 2,063 | 28.6 | 1,068 |
| Highest | 57.1 | 2,343 | 35.2 | 1,339 |
| Total 15-49 | 53.2 | 9,143 | 27.2 | 4,863 |

Note: Table is based only on women and men who slept in the household the night preceding the interview.

### 17.8 Widows Dispossessed of Property

Property grabbing, a practice where relatives of the deceased come and claim the land and other property, is a serious problem for widows and child-headed households. Traditional law in many rural areas dictates that women and children cannot inherit property. Property grabbing has a number of negative consequences, particularly for girls and women. This can worsen the vulnerability of people who care for children and the children themselves. It is therefore important to improve laws, including enforcement mechanisms, to ensure the right of women and children to inherit property after the death of a husband or father (UNICEF, 2005).

Table 17.9 shows the percentage of women 15-49 who have ever been widowed and the percentage of ever-widowed women who have been dispossessed of property. Altogether six percent of women surveyed have been widowed. Over half of everwidowed women said that they had been dispossessed of their property. This proportion is highest among the women with no education and decreases with increasing level of education. A similar relationship is observed with the wealth status: the higher the wealth quintile the less likely women are to have been dispossessed of property.

### 17.9 External Support for Very Sick Persons

When an adult member of a household falls chronically ill or dies, it can have a devastating effect on the remaining members of the household, particularly children. The SDHS collected information on the extent to which free external care and support are reaching these households. This information was obtained by asking households in which someone aged 18 to 59 years had been chronically ill for three months of the past 12 months, or had died after a chronic illness in the past 12 months, whether or not the household had received free medical, emotional, or material support to care for these persons. The results are shown in Table 17.10.

Table 17.10 External support for very sick persons
Percentage of women and men age 18-59 who have been either very sick or who died within the past 12 months after being very sick whose households received certain free basic external support to care for them within the past year, by background characteristics, Swaziland 2006-07

| Background characteristic | Percentage of very sick persons whose households received: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Medical support at least once a month during illness | Emotional support in the past 30 days ${ }^{1}$ | Social/ material support in the past 30 days $^{2}$ | At least one type of support in the past 30 days | All three types of support in the past 30 days | None of the three types of support | Number of persons |
| Age |  |  |  |  |  |  |  |
| 18-29 | 13.7 | 9.8 | 11.2 | 25.6 | 3.1 | 74.4 | 111 |
| 30-39 | 13.9 | 3.7 | 5.9 | 15.8 | 0.7 | 84.2 | 116 |
| 40-49 | 19.9 | 7.7 | 6.3 | 24.3 | 1.8 | 75.7 | 113 |
| 50-59 | 21.2 | 8.2 | 4.5 | 23.9 | 1.9 | 76.1 | 77 |
| Sex |  |  |  |  |  |  |  |
| Male | 14.1 | 5.7 | 6.3 | 19.9 | 0.5 | 80.1 | 193 |
| Female | 19.2 | 8.5 | 7.8 | 24.3 | 3.0 | 75.7 | 223 |
| Residence |  |  |  |  |  |  |  |
| Urban | 17.3 | 2.2 | 4.5 | 17.3 | 0.0 | 82.7 | 58 |
| Rural | 16.8 | 8.1 | 7.6 | 23.0 | 2.2 | 77.0 | 358 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 20.4 | 5.9 | 9.5 | 24.1 | 2.8 | 75.9 | 111 |
| Manzini | 15.4 | 9.3 | 6.5 | 22.1 | 2.2 | 77.9 | 117 |
| Shiselweni | 14.6 | 6.6 | 4.9 | 20.6 | 1.2 | 79.4 | 96 |
| Lubombo | 16.7 | 7.0 | 7.5 | 21.9 | 0.9 | 78.1 | 93 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 16.2 | 7.2 | 7.2 | 23.4 | 2.4 | 76.6 | 133 |
| Second | 19.3 | 5.2 | 7.4 | 24.2 | 0.0 | 75.8 | 103 |
| Middle | 28.4 | 16.9 | 12.5 | 34.0 | 4.8 | 66.0 | 77 |
| Fourth | 8.1 | 1.4 | 4.9 | 11.6 | 1.4 | 88.4 | 61 |
| Highest | (4.6) | (3.1) | (0.0) | (7.7) | (0.0) | (92.3) | 43 |
| Total | 16.9 | 7.2 | 7.1 | 22.2 | 1.9 | 77.8 | 416 |

Note: Table is based only on women and men who usually live in the household and who were very sick (unable to work or do normal activities) in the past 12 months or who died in the past 12 months and were very sick at least 3 of the 12 months before death. Support refers to the past 30 days for living persons and in the 30 days preceding death for dead persons. Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Support such as companionship, counselling from a trained counsellor, or spiritual support for which there was no payment
${ }^{2}$ Support such as help with household work, training for a caregiver, legal services, clothing, food, or financial support for which there was no payment

Overall, a majority (78 percent) of the households that had cared for a chronically ill person or had lost a member to chronic illness in the 12 months prior to the SDHS had not received any of these three forms of free external support. When assistance was received, it was most likely to have been in the form of medical support (17 percent). Households were equally likely to receive emotional support and social or material support ( 7 percent each). Very sick persons were somewhat more likely to receive at least one type of support if they were females than if they were males. Very sick persons in the fourth and highest wealth quintiles were much less likely to receive external support than other persons.

### 17.10 External Support for Orphans and Vulnerable Children

OVCs are generally cared for by their families, which in turn often depend on community assistance to survive. Table 17.11 shows the percentage of orphans and vulnerable children under 18 years of age whose household received free basic external support to care for the child in the last 12 months. The results in the table suggest that support is not readily available for the majority of OVCs. Fifty-nine percent of OVCs received no external support to assist in their care. Around one-third of OVCs received school-related assistance. Considerably fewer were given social/material support (8 percent) or emotional support (5 percent). The likelihood of receiving assistance generally increased with the child's age. OVCs are more likely to get support when they stay in a rural area than in an urban area and when they live in Shiselweni and Lubombo than in the Manzini and Hhohho regions. The likelihood of receiving support decreased with wealth quintile.

Table 17.11 External support for orphans and vulnerable children
Percentage of orphans and vulnerable children under age 18 years whose household received certain free basic external support to care for the child in the past 12 months, by background characteristics, Swaziland 2006-07

| Background characteristic | Percentage of orphans and vulnerable children whose households received: |  |  |  |  |  |  | Number of OVC children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Medical support in the past 12 months ${ }^{1}$ | Emotional support in the past 3 months ${ }^{2}$ | Social/ material support in the past 3 months ${ }^{3}$ | School- related assistance in the past 12 months ${ }^{4}$ | At least one type of support ${ }^{5}$ | All of the types of support | None of the types of support |  |
| Age |  |  |  |  |  |  |  |  |
| 0-4 | 5.6 | 3.8 | 4.1 | na | 11.7 | 0.0 | 88.3 | 575 |
| 5-9 | 6.1 | 4.9 | 8.9 | 29.3 | 38.6 | 0.2 | 61.4 | 936 |
| 10-14 | 4.9 | 4.4 | 8.8 | 47.1 | 51.5 | 0.3 | 48.5 | 1,318 |
| 15-17 | 4.8 | 5.5 | 7.9 | 42.8 | 48.9 | 0.1 | 51.1 | 747 |
| Sex |  |  |  |  |  |  |  |  |
| Male | 5.2 | 4.6 | 7.7 | 34.0 | 41.8 | 0.2 | 58.2 | 1,796 |
| Female | 5.4 | 4.7 | 8.0 | 34.0 | 40.6 | 0.2 | 59.4 | 1,780 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 3.8 | 2.5 | 6.3 | 20.1 | 28.6 | 0.0 | 71.4 | 409 |
| Rural | 5.5 | 4.9 | 8.1 | 35.8 | 42.8 | 0.2 | 57.2 | 3,167 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 4.6 | 5.2 | 4.6 | 27.2 | 34.1 | 0.0 | 65.9 | 779 |
| Manzini | 5.4 | 4.5 | 9.0 | 30.3 | 38.1 | 0.3 | 61.9 | 1,088 |
| Shiselweni | 5.2 | 3.4 | 6.5 | 41.4 | 48.1 | 0.0 | 51.9 | 923 |
| Lubombo | 6.0 | 5.7 | 11.1 | 37.1 | 44.5 | 0.5 | 55.5 | 786 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 6.9 | 4.5 | 8.3 | 40.0 | 47.0 | 0.3 | 53.0 | 955 |
| Second | 4.1 | 4.6 | 9.3 | 37.0 | 43.5 | 0.0 | 56.5 | 881 |
| Middle | 5.7 | 4.4 | 8.9 | 37.2 | 44.0 | 0.1 | 56.0 | 763 |
| Fourth | 4.8 | 3.4 | 5.8 | 25.9 | 33.9 | 0.1 | 66.1 | 588 |
| Highest | 4.5 | 7.3 | 4.6 | 18.2 | 27.2 | 0.5 | 72.8 | 389 |
| Total | 5.3 | 4.6 | 7.9 | 34.0 | 41.2 | 0.2 | 58.8 | 3,575 |

Note: Table is based on de jure household members, i.e., usual household members.
na $=$ Not applicable
${ }^{1}$ Medical care, supplies, or medicine
${ }^{2}$ Companionship, counselling from a trained counsellor, or spiritual support for which there was no payment
${ }^{3}$ Help with household work, training for a caregiver, legal services, clothing, food, or financial support for which there was no payment
${ }^{4}$ Allowance, free admission, books, or supplies for which there was no payment. Percentage calculated for age 5-17 years
${ }^{5}$ Four types of support for those ages 5-17, three types of support (i.e., excluding school support) received by those age 0-4 years

## YOUTH

## Africa Magongo and Nelisiwe Sikhosana

With the increasing number of HIV infections among adults, children are becoming more at risk of contracting the disease. It is estimated that the total number of children living with HIV increased from 1.5 million [1.3-1.9 million] in 2001 to 2.5 million [2.2-2.6 million] in 2007 worldwide. However, new infections among children are estimated to have declined from 460,000 [420,000-510,000] in 2001 to 420,000 [390,000-470,000] in 2007. Deaths due to AIDS among children had increased from 330,000 [380,000-560,000] in 2001 to 360,000 [350,000-540,000] in 2005, but have begun to decline to an estimated 330,000 [310,000-380,000] in 2007. Nearly 90 percent of all HIV-positive children live in subSaharan Africa (UNAIDS, 2007).

There are two ways by which children may be infected with HIV. The first is vertical, meaning mother-to-child transmission. The second is sexual activity, which for young children is usually assumed to be forced and to have occurred before the child is aware of the consequences. Another mode of transmission that has been observed is through unsafe medical equipment and practices (Gisselquist et al., 2002). The risk of HIV infection may occur as a result of exposure to infection or a lack of protection from infection (Brookes et al., 2004).

The main objective for interviewing children age 12-14 years in the 2006-07 SDHS was to identify social and community risk factors that predispose children to HIV infection and to examine the exposure to risk factors and behaviour in relation to social, economic, and cultural contexts.

A separate questionnaire was designed for these children, referred to in the survey as youth. In the absence of indicators of HIV infection in children, the questions asked to the youth were guided by literature indicating that there are several areas which may be important in defining the indicators. They are: risk for children of sexual abuse, initiation of sex and pregnancy in children, level of knowledge about sex, sexual abuse and HIV, and impact of mass media on knowledge of HIV (Brookes et al., 2004). In the SDHS, in addition to their background characteristics, children age $12-14$ were asked questions about care and protection, media exposure, knowledge and attitudes about sex, and knowledge of AIDS. While the data would be informative, no questions on sexual abuse were included in the survey due to legal and ethical reasons.

Prior to conducting interviews, informed consent was obtained from parents or guardians and from the youth. Boys and girls who consented to the interview were also asked to give blood for HIV testing. Interviews with the youth were conducted in half of the households ( 2,750 households) selected randomly from households covered in the SDHS. All boys and girls age 12-14 were eligible for individual interview. In the households selected for youth survey, a total of 876 persons age 12-14 (477 girls and 439 boys) were identified. Interviews were completed with 459 of the girls and 411 of the boys.

This chapter begins by describing the relationship of the caregiver(s) whom the youth reported look after them when they are at home, patterns of adult supervision at school, knowledge and attitudes about sex, knowledge about HIV/AIDS and other HIV/AIDS-related issues, exposure to HIV/AIDS knowledge, and the youth's opinion on available information about HIV/AIDS. The chapter also discusses the youth's attitudes about dating and decisions regarding sex and their knowledge of various modes to prevent AIDS infection. The HIV status of the youth is presented in Chapter 14.

### 18.1 CAREGIVER

Table 18.1 shows the relationship of the youth with their caregivers. The entries are not mutually exclusive; a child may have more than one person who looks after him or her when he/she is at home. A high proportion of boys and girls age 12-14 are being looked after by their biological mothers ( 55 percent) when they are at home, 27 percent by their grandmother, and 26 percent by their biological fathers.

There are some variations in the caregivers of children age 12-14 by various background characteristics. Children who live in Lubombo are more likely than those in other regions to mention their biological mother and father as their main caregivers. Children who live with both parents are more likely to mention their mothers than their fathers as their caregivers ( 92 percent compared with 73 percent).

It is worth highlighting the role of grandmothers in giving care to children, even when both parents are still alive ( 21 percent). Half of children who are not living with either parent are being taken care of by their grandmothers. Most of these children are orphans whose parents are dead (49 percent).

| Table 18.1 Relationship of caregiver(s) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 12-14 by the person(s) whom they report look after them when they are at home according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | Biological parent |  | Grandparent |  | Sibling |  | Other family member |  | Non-family member |  | Don't know/ missing | Number of children |
|  |  |  | Grand- | Grand- |  |  |  |  |  |  |  |  |
|  | Father | Mother | mother | father | Brother | Sister | Female | Male | Female | Male |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |
| Female | 22.6 | 54.5 | 27.0 | 4.7 | 3.8 | 1.5 | 13.7 | 4.6 | 5.7 | 1.2 | 0.2 | 465 |
| Male | 30.0 | 55.0 | 26.1 | 5.8 | 3.0 | 3.2 | 9.4 | 8.0 | 5.8 | 1.6 | 0.0 | 409 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 28.1 | 56.8 | 26.0 | 2.5 | 1.5 | 1.1 | 17.0 | 6.3 | 5.8 | 2.1 | 0.0 | 104 |
| Rural | 25.8 | 54.5 | 26.7 | 5.6 | 3.7 | 2.4 | 11.0 | 6.2 | 5.8 | 1.3 | 0.1 | 769 |
| Region |  |  |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 27.0 | 54.6 | 17.8 | 3.5 | 4.5 | 1.6 | 15.1 | 6.0 | 6.5 | 1.5 | 0.4 | 228 |
| Manzini | 21.6 | 49.9 | 32.2 | 6.1 | 2.2 | 2.4 | 11.8 | 6.8 | 4.7 | 1.6 | 0.0 | 255 |
| Shiselweni | 23.3 | 53.4 | 33.4 | 7.4 | 2.1 | 2.4 | 7.7 | 6.3 | 6.4 | 1.8 | 0.0 | 213 |
| Lubombo | 34.6 | 63.6 | 21.7 | 3.6 | 5.3 | 2.9 | 12.1 | 5.4 | 5.5 | 0.4 | 0.0 | 178 |
| Living arrangements |  |  |  |  |  |  |  |  |  |  |  |  |
| Living with both parents | 73.1 | 92.4 | 5.2 | 1.8 | 0.8 | 1.5 | 3.1 | 0.7 | 1.5 | 0.0 | 0.0 | 151 |
| Living with father/not mother | 69.4 | 19.9 | 14.8 | 7.8 | 2.9 | 0.0 | 23.4 | 5.9 | 1.3 | 0.0 | 0.0 | 71 |
| Living with mother/not father | 14.6 | 93.4 | 10.6 | 2.0 | 2.5 | 2.3 | 2.8 | 3.1 | 2.8 | 0.0 | 0.0 | 295 |
| Not living with either parent | 7.1 | 14.1 | 50.0 | 7.5 | 5.8 | 3.3 | 21.1 | 11.1 | 11.5 | 3.0 | 0.3 | 332 |
| Missing | (6.9) | (11.4) | (66.6) | (26.6) | (0.0) | (0.0) | (11.0) | (11.2) | (3.5) | (9.6) | (0.0) | 25 |
| Orphanhood status |  |  |  |  |  |  |  |  |  |  |  |  |
| Both parents alive | 35.9 | 64.8 | 21.2 | 4.0 | 2.3 | 1.4 | 10.4 | 4.6 | 5.3 | 1.0 | 0.2 | 552 |
| Mother dead/father alive | 32.6 | 10.1 | 44.6 | 11.3 | 4.2 | 1.6 | 20.2 | 9.2 | 5.7 | 3.4 | 0.0 | 73 |
| Father dead/ mother alive | 2.9 | 61.5 | 26.9 | 5.6 | 5.4 | 3.8 | 7.9 | 6.6 | 4.5 | 1.1 | 0.0 | 180 |
| Both parents dead | 1.2 | 4.0 | 49.1 | 7.5 | 6.1 | 6.2 | 22.9 | 14.9 | 13.1 | 3.1 | 0.0 | 69 |
| OVC status |  |  |  |  |  |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 9.3 | 37.5 | 35.7 | 7.3 | 5.3 | 3.8 | 13.9 | 9.0 | 6.6 | 2.1 | 0.0 | 322 |
| Vulnerable ${ }^{2}$ | (26.0) | (63.3) | (22.1) | (0.0) | (3.6) | (2.5) | (9.3) | (6.8) | (2.5) | (2.5) | (0.0) | 32 |
| Orphan and vulnerable | * | * | * | * | * | , | * | * | * | * | * | 14 |
| Neither orphan nor vulnerable | 36.4 | 64.0 | 21.7 | 4.2 | 2.2 | 1.3 | 10.4 | 4.6 | 5.3 | 0.9 | 0.2 | 533 |
| Total | 26.1 | 54.8 | 26.6 | 5.2 | 3.4 | 2.3 | 11.7 | 6.2 | 5.8 | 1.4 | 0.1 | 874 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ One or both parents dead <br> ${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months |  |  |  |  |  |  |  |  |  |  |  |  |

Virtually no child age 12-14 reported having no caregiver. A majority (57 percent) have one person who takes care of them, 37 percent have two caregivers, and only 6 percent have three or more people taking care of them when they are at home (Table 18.2). Small differentials are observed across subgroups of children, except by orphanhood status. Orphans are more likely to say that they have one caregiver, while children who are neither orphan nor vulnerable are more likely to have more than one caregiver.

| Table 18.2 Number of caregivers |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of children age 12-14 by the number of persons who look after the child at home according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |
| Background characteristic | Number of persons who look after child |  |  |  | Total | Number of children age 12-14 |
|  | None | 1 | 2 | 3 |  |  |
| Sex |  |  |  |  |  |  |
| Female | 0.3 | 61.5 | 31.9 | 6.3 | 100.0 | 465 |
| Male | 0.0 | 51.9 | 43.1 | 5.0 | 100.0 | 409 |
| Residence |  |  |  |  |  |  |
| Urban | 0.0 | 53.2 | 39.3 | 7.6 | 100.0 | 104 |
| Rural | 0.2 | 57.5 | 36.9 | 5.5 | 100.0 | 769 |
| Region |  |  |  |  |  |  |
| Hhohho | 0.5 | 61.3 | 34.1 | 4.1 | 100.0 | 228 |
| Manzini | 0.0 | 61.0 | 32.7 | 6.3 | 100.0 | 255 |
| Shiselweni | 0.0 | 58.8 | 35.4 | 5.8 | 100.0 | 213 |
| Lubombo | 0.0 | 43.6 | 49.5 | 6.9 | 100.0 | 178 |
| Living arrangements |  |  |  |  |  |  |
| Living with both parents | 0.0 | 22.8 | 71.8 | 5.4 | 100.0 | 151 |
| Living with father/not mother | 0.0 | 57.8 | 36.0 | 6.1 | 100.0 | 71 |
| Living with mother/not father | 0.0 | 68.4 | 27.2 | 4.4 | 100.0 | 295 |
| Not living with either parent | 0.4 | 62.6 | 30.2 | 6.8 | 100.0 | 332 |
| Missing | (0.0) | (52.6) | (40.8) | (6.6) | 100.0 | 25 |
| Orphanhood status |  |  |  |  |  |  |
| Both parents alive | 0.0 | 49.4 | 46.1 | 4.6 | 100.0 | 552 |
| Mother dead/father alive | 0.0 | 60.6 | 33.2 | 6.2 | 100.0 | 73 |
| Father dead/mother alive | 0.0 | 76.3 | 15.8 | 7.8 | 100.0 | 180 |
| Both parents dead | 1.8 | 63.7 | 25.9 | 8.6 | 100.0 | 69 |
| OVC status |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 0.4 | 70.0 | 21.9 | 7.6 | 100.0 | 322 |
| Vulnerable ${ }^{2}$ | (0.0) | (62.3) | (31.6) | (6.1) | 100.0 | 32 |
| Orphan and vulnerable | * | * | * | * | 100.0 | 14 |
| Neither orphan nor vulnerable | 0.0 | 49.4 | 46.2 | 4.4 | 100.0 | 533 |
| Total | 0.1 | 57.0 | 37.2 | 5.7 | 100.0 | 874 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ One or both parents dead
${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months

### 18.2 Supervision Going to and From School and at School

Another risk for children happens when they are on their way to and from school, and at school. Respondents to the youth survey in the SDHS were asked whether they are accompanied by an adult when going to and from school. To study the extent of protection at school, they were also asked whether a teacher or another adult always supervises their safety.

Some parents or guardians take the responsibility of accompanying their children to and from school. Table 18.3 shows that a majority ( 83 percent) of youths walk to school, 8 percent are always accompanied by an adult when going to school, and 5 percent are accompanied by an adult on their way home from school. Youth in the urban areas are more likely to be accompanied by an adult going to and coming from school, while rural children are much more likely to walk. For example, 88 percent of rural children walk to school compared with 50 percent of urban children.

Supervision of youth also occurs within the school premises. In general, 68 percent of children age 12-14 report that a teacher or other adult is always present in classroom, 65 percent say that a teacher or other adult always watches children coming to or leaving school, and 63 percent say that a teacher or an adult always checks that no unauthorized person enters the school. Only 31 percent of children report that toilets are monitored by a teacher or an adult. There are marginal differentials across subgroups of children.

| Table 18.3 Adult supervision going to and at school |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 12-14 reporting caregiver or other adult accompanies child to and from school each day, percentage walking to school, percentage reporting that at school an adult is always in classroom, always watches children entering or exiting school, monitors the toilets, and checks that no unauthorized individuals enter school, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |
|  | Adult always accompanies child |  |  | At school an adult: |  |  |  | Number of children |
|  |  |  |  |  | Watches children entering/ existing school |  | Checks for <br> unauthorized <br> individual <br> entering <br> school |  |
| Background characteristic | From home to school | From school to home | Child walks to school | Is always in classroom |  | Monitors toilets |  |  |
| Sex |  |  |  |  |  |  |  |  |
| Female | 8.0 | 5.0 | 81.0 | 65.6 | 62.9 | 30.8 | 61.9 | 446 |
| Male | 7.0 | 3.9 | 85.9 | 69.8 | 68.0 | 32.1 | 63.3 | 384 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 15.2 | 6.4 | 50.1 | 67.6 | 68.1 | 26.9 | 63.2 | 100 |
| Rural | 6.5 | 4.2 | 87.8 | 67.5 | 64.9 | 32.0 | 62.4 | 730 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 9.0 | 4.8 | 83.4 | 69.6 | 59.9 | 28.9 | 61.5 | 209 |
| Manzini | 11.1 | 6.5 | 75.6 | 71.5 | 68.1 | 28.5 | 63.2 | 240 |
| Shiselweni | 5.0 | 3.9 | 87.8 | 61.2 | 71.3 | 38.7 | 68.3 | 210 |
| Lubombo | 3.9 | 1.9 | 88.4 | 67.2 | 60.2 | 29.7 | 55.7 | 171 |
| Living arrangements |  |  |  |  |  |  |  |  |
| Living with both parents | 8.9 | 6.2 | 84.7 | 67.2 | 68.1 | 29.3 | 66.0 | 142 |
| Living with father/not mother | 6.3 | 3.4 | 82.9 | 75.1 | 68.1 | 39.0 | 64.6 | 68 |
| Living with mother/not father | 6.7 | 3.5 | 78.7 | 67.0 | 67.7 | 25.7 | 61.3 | 289 |
| Not living with either parent | 8.2 | 4.6 | 86.2 | 66.9 | 61.0 | 36.0 | 60.1 | 310 |
| Missing | (3.9) | (8.7) | (93.6) | (62.3) | (66.5) | (31.5) | (84.8) | 21 |
| Orphanhood status |  |  |  |  |  |  |  |  |
| Both parents alive | 8.0 | 5.4 | 80.6 | 66.3 | 67.5 | 30.8 | 63.0 | 524 |
| Mother dead/father alive | 2.9 | 2.9 | 88.3 | 69.2 | 64.5 | 31.5 | 61.2 | 70 |
| Father dead/mother alive | 7.6 | 1.7 | 87.1 | 71.8 | 61.8 | 26.2 | 60.7 | 172 |
| Both parents dead | 9.1 | 6.2 | 89.8 | 64.4 | 57.2 | 50.8 | 64.7 | 64 |
| OVC status |  |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 6.8 | 2.9 | 87.9 | 69.6 | 61.5 | 32.5 | 61.7 | 306 |
| Vulnerable ${ }^{2}$ | (3.7) | (0.0) | (93.9) | (67.6) | (62.5) | (32.8) | (68.8) | 32 |
| Orphan and vulnerable | * | * | * | - | * | * | * | 14 |
| Neither orphan nor vulnerable | 8.3 | 5.6 | 79.9 | 66.5 | 67.6 | 30.5 | 63.1 | 506 |
| Total | 7.5 | 4.5 | 83.3 | 67.5 | 65.3 | 31.4 | 62.5 | 830 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ One or both parents dead <br> ${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months |  |  |  |  |  |  |  |  |

### 18.3 Knowledge and Attitudes about Sex

Children benefit from the knowledge of the physiology of human reproduction and the means to protect oneself against sexual or reproductive problems and diseases. Better knowledge is expected to lead to correct attitudes and responsible reproductive health behaviour. In the SDHS, children age 12-14 were asked if they know the meaning of sex and whether their parents or caregiver had talked to them about sex and sexual abuse.

Table 18.4 shows the knowledge and attitudes about sex among girls and boys age 12-14 years. Six in ten youth ( 61 percent) say that they know the meaning of having sex. Girls and urban residents are more knowledgeable of the meaning of having sex than boys. Sixty-three percent of girls and 59 percent of boys report knowing the meaning of having sex, and 74 percent of youth in urban areas know the meaning of having sex compared with 60 percent of rural youth. With regard to regional variations, knowledge about sex ranges from 65 percent in Lubombo to 54 percent in Hhohho.

| Table 18.4 Knowledge and attitudes about sex |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 12-14 who know the meaning of having sex and who attended life skills course, and, among children who know the meaning of having sex, percentage whose parent or caregiver have talked to the child about sex and sexual abuse, according to background characteristics, Swaziland, 2006-07 |  |  |  |  |  |  |  |
| Background characteristic | Knows the meaning of having sex | Attended life skills course |  | Number of children | Parents/ <br> caregiver talked about sex | Parents/ caregiver talked about sex abuse | Number of children knowing meaning of having sex |
|  |  | $\begin{gathered} \text { At } \\ \text { school } \end{gathered}$ | Somewhere else |  |  |  |  |
| Sex |  |  |  |  |  |  |  |
| Female | 63.3 | 38.6 | 5.1 | 465 | 46.7 | 53.1 | 295 |
| Male | 59.0 | 33.7 | 4.8 | 409 | 24.7 | 31.4 | 241 |
| Residence |  |  |  |  |  |  |  |
| Urban | 73.6 | 45.0 | 5.4 | 104 | 47.3 | 55.1 | 77 |
| Rural | 59.7 | 35.1 | 4.9 | 769 | 35.0 | 41.3 | 459 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 53.8 | 31.6 | 4.1 | 228 | 38.6 | 45.1 | 123 |
| Manzini | 62.5 | 35.7 | 5.8 | 255 | 38.9 | 47.0 | 159 |
| Shiselweni | 64.6 | 39.1 | 4.0 | 213 | 37.3 | 38.7 | 138 |
| Lubombo | 65.4 | 40.0 | 6.2 | 178 | 31.4 | 41.6 | 116 |
| Living arrangements |  |  |  |  |  |  |  |
| Living with both parents | 58.8 | 30.8 | 5.8 | 151 | 38.7 | 50.2 | 89 |
| Living with father/not mother | 56.1 | 41.0 | 7.1 | 71 | 15.5 | 23.5 | 40 |
| Living with mother/not father | 64.3 | 37.4 | 4.1 | 295 | 40.8 | 47.5 | 189 |
| Not living with either parent | 61.2 | 37.8 | 4.5 | 332 | 37.0 | 40.1 | 204 |
| Missing | * | * | * | * | * | * | 15 |
| Orphanhood status |  |  |  |  |  |  |  |
| Both parents alive | 61.1 | 37.1 | 6.5 | 552 | 37.9 | 45.3 | 337 |
| Mother dead/father alive | 64.3 | 42.3 | 1.1 | 73 | 27.7 | 28.6 | 47 |
| Father dead/mother alive | 59.0 | 33.7 | 2.6 | 180 | 37.7 | 48.8 | 106 |
| Both parents dead | 66.2 | 30.9 | 3.6 | 69 | (35.6) | (30.6) | 46 |
| OVC status |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 61.8 | 35.0 | 2.5 | 322 | 34.9 | 39.8 | 199 |
| Vulnerable ${ }^{2}$ | 45.3 | 40.0 | 2.5 | 32 | * | * | 15 |
| Orphan and vulnerable | * | * | * | 14 | * | * | 6 |
| Neither orphan nor vulnerable | 61.5 | 36.9 | 6.5 | 533 | 37.9 | 45.2 | 328 |
| Total | 61.3 | 36.3 | 5.0 | 874 | 36.8 | 43.3 | 536 |
| Note: An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ One or both parents dead <br> ${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months |  |  |  |  |  |  |  |

Girls and boys age 12-14 were asked if they had attended life skills courses in school or in any environment. Thirty-six percent of these children indicated receiving life skills from school, while 5 percent received it somewhere else. Girls are more likely than boys to report attending life skills courses at school ( 39 percent compared with 34 percent), and children in urban areas are more likely than rural children to have taken life skills courses in school ( 45 percent and 35 percent, respectively).

The subject of sex and sexual abuse is discussed by some parents or caregivers with the youth. The data show that 37 percent of youth talked about sex and 43 percent talked about sexual abuse with their parents. Girls are much more likely to have been told about sex and sexual abuse than boys. For instance, while almost half ( 47 percent) of girls have talked about sex with their parents or caregiver, only one in four boys ( 25 percent) discussed sex with their parents or caregiver. Once again, children in the urban areas are more likely to have discussed the two subjects with their parents or caregivers than those in the rural areas.

Knowledge about HIV transmission and ways to prevent it are not useful if people have no control of their involvement in sex practices. To assess their attitudes towards safer sex, persons age 12-14 who had indicated that they know the meaning of sex were asked if it is acceptable to have many boyfriends or girlfriends. They were also asked their opinion regarding a girl's refusal to have sex. In general, 13 percent say that a girl cannot refuse sex if a boy proposes love, and 11 percent say that a girl cannot refuse sex if a boy gives presents. Boys are more likely than girls to agree with these statements. For example, 17 percent of boys say that a girl cannot refuse sex if a boy proposes love, compared with 9 percent of girls. Boys think that they are much more in control over when, where, and how the couple should have sex ( 25 percent of boys compared with 9 percent of girls). Less than 1 percent of both girls and boys agreed that a boy can have multiple girlfriends or a girl can have multiple boyfriends.

Figure 18.1 Attitudes about Dating and Decisions to Have Sex


### 18.4 Knowledge and Attitudes about HIV/AIDS

Virtually all children age 12-14 have heard of HIV/AIDS (97 percent) and there are no major variations in the knowledge by their background characteristics. Among children who have heard about HIV/AIDS, 84 percent believe it is possible to avoid or reduce the chances of getting AIDS and 82 percent know that a healthy-looking person can have AIDS. This belief and knowledge are higher among girls than boys. For instance, 87 percent of girls and 80 percent of boys believe that there are ways to avoid or reduce the chances of getting AIDS. Knowledge of AIDS is higher among children who live in urban areas than in rural areas ( 87 percent and 83 percent, respectively), as indicated in Table 18.5.

| Table 18.5 Knowledge about HIV/AIDS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 12-14 who have heard about HIV/AIDS and, among those having heard of AIDS, percentage who believe it is possible to avoid or reduce the chances of getting AIDS and who know that a healthy person can have AIDS, Swaziland 2006-07 |  |  |  |  |  |
|  |  |  | Among children age 12-14 who have heard about AIDS, percentage who: |  |  |
| Background characteristic | Heard about AIDS | Number of children | Believe it is possible to avoid or reduce the chances of getting AIDS | Know a healthylooking person can have AIDS | Number of children who have heard about AIDS |
| Sex |  |  |  |  |  |
| Female | 97.8 | 465 | 86.8 | 83.9 | 455 |
| Male | 96.5 | 409 | 80.3 | 79.7 | 394 |
| Residence |  |  |  |  |  |
| Urban | 98.9 | 104 | 87.3 | 85.2 | 103 |
| Rural | 97.0 | 769 | 83.3 | 81.5 | 746 |
| Region |  |  |  |  |  |
| Hhohho | 95.1 | 228 | 81.8 | 80.0 | 217 |
| Manzini | 98.5 | 255 | 85.4 | 84.6 | 251 |
| Shiselweni | 99.1 | 213 | 87.4 | 84.8 | 211 |
| Lubombo | 95.9 | 178 | 79.2 | 77.1 | 171 |
| Living arrangements |  |  |  |  |  |
| Living with both parents | 95.8 | 151 | 81.8 | 78.4 | 145 |
| Living with father/not mother | 98.5 | 71 | 79.8 | 80.0 | 70 |
| Living with mother/not father | 97.7 | 295 | 87.7 | 83.9 | 288 |
| Not living with either parent | 97.3 | 332 | 81.9 | 83.0 | 323 |
| Missing | (94.9) | 25 | (84.2) | (73.3) | 24 |
| Orphanhood status |  |  |  |  |  |
| Both parents alive | 96.8 | 552 | 83.5 | 82.5 | 534 |
| Mother dead/father alive | 100.0 | 73 | 90.4 | 76.9 | 73 |
| Father dead/mother alive | 97.3 | 180 | 83.6 | 83.1 | 175 |
| Both parents dead | 97.2 | 69 | 78.7 | 80.2 | 67 |
| OVC status |  |  |  |  |  |
| Orphan ${ }^{1}$ | 97.9 | 322 | 84.1 | 81.1 | 315 |
| Vulnerable ${ }^{2}$ | (90.8) | 32 | (91.0) | (86.5) | 29 |
| Orphan and vulnerable | * | 14 | * | * | 13 |
| Neither orphan nor vulnerable | 97.2 | 533 | 83.3 | 82.6 | 518 |
| Total | 97.2 | 874 | 83.7 | 82.0 | 850 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ One or both parents dead <br> ${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months |  |  |  |  |  |

Figure 18.2 shows the percentage of children age 12-14 who know about AIDS, and who mention without prompting the various ways a person can avoid or reduce the chances of getting AIDS. Overall, 64 percent of children mention abstaining from sex as a way of reducing the chances of getting AIDS, 47 percent mention the use of condoms, and 19 percent mention avoiding blood transfusions. One in six children (15 percent) say that the chances of contracting AIDS can be reduced or avoided by being faithful to one sexual partner. There are small differentials in the responses given by girls and boys.

## Figure 18.2 Knowledge of Various Modes to Avoid AIDS



Table 18.6 presents the children's knowledge about issues related to HIV/AIDS. Knowledge of male and female condoms is widespread among children age 12-14; 77 percent of these children indicate that they have heard about male condoms and 43 percent have heard about female condoms. Boys are more likely than girls to have heard of male condoms ( 85 percent compared with 71 percent). However, girls are more likely than boys to have heard of female condoms ( 48 percent compared with 37 percent). As observed in the previous findings, children in the urban areas are more likely than rural children to have heard about male and female condoms. For male condoms, the proportion is 88 percent in urban areas and 76 percent in rural areas.

When asked whether boys and girls their age should be taught how to use condoms to avoid getting AIDS, 37 percent of those who know about AIDS and condoms give a positive response. A large proportion ( 62 percent) of children believe that children their age should be taught in school about delaying sex until they get married to avoid getting AIDS.

## Table 18.6 Knowledge about HIV/AIDS-related issues

Among children age 12-14 years, percentage who have heard about male and female condoms and, among those having heard of AIDS and about either the male or female condom, percentage who believe children their age should be taught about using a condom to avoid AIDS, and among children age 12-14 knowing about AIDS and about the meaning of having sex, percentage who believe children their age should be taught in school about waiting until they get married before having sex to avoid AIDS, by background characteristics, Swaziland 2006-07

| Background characteristic | Heard about male condom | Heard about female condom | Number of children | Among children knowing about AIDS and condoms, percentage believing children their age should be taught to use condoms to avoid AIDS | Number of children knowing about AIDS and about condoms | Percentage who believe children their age should be taught in school about waiting until they get married before having sex to avoid AIDS | Number of children who have heard about AIDS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |
| Female | 70.7 | 47.9 | 465 | 38.4 | 346 | 64.0 | 455 |
| Male | 84.8 | 36.9 | 409 | 36.2 | 345 | 58.8 | 394 |
| Residence |  |  |  |  |  |  |  |
| Urban | 87.6 | 56.2 | 104 | 42.1 | 93 | 73.6 | 103 |
| Rural | 75.9 | 40.9 | 769 | 36.5 | 597 | 59.9 | 746 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 73.5 | 39.7 | 228 | 35.4 | 170 | 54.8 | 217 |
| Manzini | 79.4 | 46.4 | 255 | 42.0 | 210 | 62.2 | 251 |
| Shiselweni | 79.3 | 38.8 | 213 | 36.3 | 173 | 64.2 | 211 |
| Lubombo | 76.6 | 46.2 | 178 | 33.6 | 138 | 66.1 | 171 |
| Living arrangements |  |  |  |  |  |  |  |
| Living with both parents | 74.9 | 45.7 | 151 | 29.7 | 117 | 60.3 | 145 |
| Living with father/not mother | 72.3 | 39.4 | 71 | 44.2 | 54 | 55.6 | 70 |
| Living with mother/not father | 78.9 | 42.8 | 295 | 36.7 | 237 | 64.7 | 288 |
| Not living with either parent | 78.5 | 43.0 | 332 | 39.2 | 264 | 60.9 | 323 |
| Missing | (69.9) | (29.4) | 25 | 44.7 | 18 | 57.9 | 24 |
| Orphanhood status |  |  |  |  |  |  |  |
| Both parents alive | 77.1 | 43.3 | 552 | 33.0 | 440 | 61.7 | 534 |
| Mother dead/father alive | 77.6 | 35.8 | 73 | 49.9 | 57 | 62.9 | 73 |
| Father dead/mother alive | 77.7 | 44.7 | 180 | 40.8 | 140 | 58.7 | 175 |
| Both parents dead | 77.2 | 40.5 | 69 | 49.6 | 54 | 66.6 | 67 |
| OVC status |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 77.6 | 41.8 | 322 | 44.8 | 251 | 61.3 | 315 |
| Vulnerable ${ }^{2}$ | (65.6) | (38.9) | 32 | * | 23 | (49.9) | 29 |
| Orphan and vulnerable | * | * | 14 | * | 10 | * | 13 |
| Neither orphan nor vulnerable | 77.9 | 43.5 | 533 | 33.3 | 427 | 61.9 | 518 |
| Total | 77.3 | 42.7 | 874 | 37.3 | 691 | 61.6 | 850 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ One or both parents dead
${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months

### 18.5 Exposure to Media Messages on HIV/AIDS

Access to information is essential in increasing knowledge and awareness of what is taking place around one, so as to influence one's perceptions and behaviour. Children age $12-14$ were asked if they had received information through mass media; the findings are presented in Table 18.7. The most popular media is the radio ( 70 percent). Between 33 percent and 36 percent of children received HIV/AIDS information from television, newspapers, leaflets, posters, and billboards. In general, girls are more likely than boys to be exposed to HIV/AIDS information through any media. Urban children are also more exposed to HIV/AIDS information than rural children. With regard to regional variations, children in the Manzini region are more likely to be exposed to such information than in other regions. There are no major variations according to the child's living arrangements, orphanhood status, and OVC status.

Table 18.7 Exposure to information on HIV/AIDS through mass media
Percentage of children age 12-14 who reported receiving HIV/AIDS information through various mass media sources, according to background characteristics, Swaziland 2006-07

| Background characteristic | Television | Radio | Newspaper | Magazine | Leaflets | Posters | Billboards | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sex |  |  |  |  |  |  |  |  |
| Female | 37.5 | 72.0 | 40.0 | 25.5 | 37.2 | 36.4 | 37.2 | 465 |
| Male | 31.9 | 68.1 | 31.0 | 22.3 | 30.0 | 35.3 | 28.3 | 409 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 67.9 | 79.8 | 59.4 | 43.0 | 51.2 | 61.2 | 62.3 | 104 |
| Rural | 30.4 | 68.9 | 32.6 | 21.4 | 31.5 | 32.4 | 29.0 | 769 |
| Region |  |  |  |  |  |  |  |  |
| Hhohho | 35.7 | 68.0 | 33.8 | 17.8 | 31.9 | 32.5 | 30.1 | 228 |
| Manzini | 40.8 | 73.7 | 43.2 | 30.8 | 39.3 | 46.8 | 46.2 | 255 |
| Shiselweni | 31.8 | 68.6 | 37.2 | 24.3 | 29.1 | 30.0 | 26.6 | 213 |
| Lubombo | 29.1 | 69.8 | 26.1 | 21.8 | 34.1 | 31.6 | 25.6 | 178 |
| Living arrangements |  |  |  |  |  |  |  |  |
| Living with both parents | 32.9 | 64.7 | 33.6 | 24.0 | 35.8 | 35.7 | 31.0 | 151 |
| Living with father/not mother | 30.5 | 70.4 | 29.7 | 21.4 | 32.2 | 37.3 | 33.9 | 71 |
| Living with mother/not father | 30.2 | 69.1 | 38.0 | 26.3 | 36.4 | 36.5 | 34.0 | 295 |
| Not living with either parent | 41.3 | 74.1 | 36.2 | 23.0 | 31.4 | 35.6 | 33.7 | 332 |
| Missing | (29.2) | (63.6) | (33.9) | (16.4) | (28.5) | (30.1) | (21.6) | 25 |
| Orphanhood status |  |  |  |  |  |  |  |  |
| Both parents alive | 36.0 | 68.6 | 37.4 | 27.1 | 35.7 | 36.7 | 33.5 | 552 |
| Mother dead/father alive | 38.7 | 68.6 | 38.6 | 17.7 | 29.8 | 33.3 | 39.6 | 73 |
| Father dead/mother alive | 30.8 | 74.1 | 30.0 | 19.7 | 31.7 | 36.9 | 30.0 | 180 |
| Both parents dead | 33.2 | 74.1 | 34.8 | 16.8 | 28.5 | 29.3 | 30.0 | 69 |
| OVC status |  |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 33.1 | 72.8 | 33.0 | 18.6 | 30.6 | 34.4 | 32.2 | 322 |
| Vulnerable ${ }^{2}$ | (35.3) | (63.3) | (23.2) | (19.5) | (36.1) | (37.9) | (30.3) | 32 |
| Orphan and vulnerable | * | * | * | * | * | * | * | 14 |
| Neither orphan nor vulnerable | 36.4 | 69.5 | 38.2 | 27.2 | 35.6 | 36.7 | 33.5 | 533 |
| Total | 34.9 | 70.2 | 35.8 | 24.0 | 33.8 | 35.9 | 33.0 | 874 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ One or both parents dead
${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months

Children were also asked if they had seen stickers, clothing, red ribbon, signs on a bus, wall murals, and AIDS plays with HIV/AIDS information over the 12 months prior to the survey. Seven in ten children indicate that they have seen HIV/AIDS information on a red ribbon nadge or on clothing, and 58 percent had seen an AIDS play (Table 18.8). Stickers ( 38 percent) and wall murals ( 86 percent) are not as notable as these other media. As is the case with mass media, girls and children who live in urban areas are more likely than other children to have seen these other media messages on HIV/AIDS. Exposure is generally higher among children in the Manzini region, and low among children in the Lubombo region, except for the AIDS play, which has the most viewers in the Lubombo region. There are variations in the exposure to media by the child's living arrangements, orphanhood status, and OVC status, but there is no clear pattern.

| Table 18.8 Exposure to HIV/AIDS messages through other media |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of children age 12-14 who have seen HIV/AIDS information or messages on other media during the 12 months before the survey, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |
| Background characteristic | Stickers | Clothing | Red ribbon badge | Sign on bus or combi | Wall <br> mural | AIDS <br> play | Number |
| Sex |  |  |  |  |  |  |  |
| Female | 41.8 | 69.4 | 77.7 | 48.1 | 31.2 | 64.3 | 465 |
| Male | 34.5 | 68.3 | 64.8 | 40.9 | 20.5 | 49.8 | 409 |
| Residence |  |  |  |  |  |  |  |
| Urban | 56.2 | 86.4 | 84.7 | 64.8 | 44.4 | 76.0 | 104 |
| Rural | 36.0 | 66.5 | 69.9 | 42.0 | 23.8 | 55.0 | 769 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 37.2 | 68.0 | 68.3 | 46.2 | 27.8 | 57.0 | 228 |
| Manzini | 44.6 | 71.3 | 78.4 | 50.8 | 30.8 | 57.0 | 255 |
| Shiselweni | 38.5 | 69.6 | 73.9 | 44.4 | 23.7 | 55.4 | 213 |
| Lubombo | 31.0 | 65.9 | 63.7 | 34.5 | 20.7 | 61.4 | 178 |
| Living arrangements |  |  |  |  |  |  |  |
| Living with both parents | 34.2 | 65.5 | 65.8 | 40.6 | 20.7 | 51.6 | 151 |
| Living with father/not mother | 32.2 | 70.6 | 72.3 | 40.8 | 33.6 | 62.4 | 71 |
| Living with mother/not father | 41.6 | 69.9 | 73.9 | 43.9 | 25.3 | 58.0 | 295 |
| Not living with either parent | 39.4 | 70.2 | 72.1 | 47.8 | 26.9 | 58.8 | 332 |
| Missing | (30.1) | (56.3) | (74.3) | (49.7) | (41.6) | (56.2) | 25 |
| Orphanhood status |  |  |  |  |  |  |  |
| Both parents alive | 38.5 | 67.7 | 70.6 | 45.2 | 26.2 | 56.0 | 552 |
| Mother dead/father alive | 34.8 | 73.9 | 67.9 | 49.2 | 33.5 | 64.9 | 73 |
| Father dead/mother alive | 40.1 | 72.2 | 76.4 | 42.3 | 25.2 | 61.3 | 180 |
| Both parents dead | 37.4 | 65.2 | 71.9 | 42.4 | 21.7 | 51.8 | 69 |
| OVC status |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 38.3 | 71.1 | 73.5 | 43.9 | 26.3 | 60.1 | 322 |
| Vulnerable ${ }^{2}$ | (37.1) | (64.5) | (81.0) | (40.0) | (22.9) | (63.2) | 32 |
| Orphan and vulnerable | * | * | * | * | * | * | 14 |
| Neither orphan nor vulnerable | 38.5 | 68.0 | 70.2 | 45.0 | 26.2 | 56.0 | 533 |
| Total | 38.4 | 68.9 | 71.7 | 44.7 | 26.2 | 57.5 | 874 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ One or both parents dead <br> ${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months |  |  |  |  |  |  |  |

Ascertaining places where the youth access HIV/AIDS information is important to strengthen the interventions. Table 18.9 provides information on the percentage of girls and boys age 12-14 who receive information on HIV/AIDS at various places during the 12 months before the survey according to background characteristics. School plays a key role in providing information to children age 12-14; 83 percent of children say that they receive information on HIV/AIDS in schools, 45 percent from health facilities, and 37 percent from religious meetings. Girls are more likely to have received this information than boys. For instance, 85 percent of girls and 81 percent of boys had received information from school. HIV/AIDS information from youth clubs is more accessible to youth in urban areas ( 31 percent) than to youth in rural areas ( 14 percent). There are no major regional variations in places where HIV/AIDS information can be accessed.

| Table 18.9 Places for information about HIV/AIDS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of girls and boys age 12-14 receiving information on HIV/AIDS at various places during the 12 months before the survey, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |
| Background characteristic | School | Youth club | Community meeting | Religious meeting | Health facility | Doctor's office | Pharmacy or chemist | AIDS organisation | Local shop/ spaza | Number |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Female | 85.0 | 18.1 | 13.7 | 39.7 | 49.7 | 22.3 | 13.4 | 31.6 | 13.1 | 465 |
| Male | 81.0 | 13.1 | 12.1 | 34.5 | 40.5 | 14.1 | 6.0 | 22.7 | 10.2 | 409 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 91.0 | 31.0 | 10.1 | 46.2 | 55.6 | 23.7 | 14.4 | 44.1 | 16.5 | 104 |
| Rural | 82.1 | 13.7 | 13.3 | 36.1 | 44.0 | 17.8 | 9.4 | 25.1 | 11.1 | 769 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 80.1 | 14.1 | 12.7 | 38.9 | 43.2 | 16.4 | 8.6 | 22.9 | 12.1 | 228 |
| Manzini | 84.9 | 17.8 | 11.6 | 43.1 | 45.0 | 17.7 | 7.8 | 30.7 | 12.5 | 255 |
| Shiselweni | 86.4 | 14.7 | 15.8 | 32.8 | 48.0 | 22.6 | 14.5 | 29.1 | 11.9 | 213 |
| Lubombo | 80.5 | 16.3 | 11.8 | 32.2 | 45.6 | 17.4 | 9.3 | 26.4 | 9.9 | 178 |
| Living arrangements |  |  |  |  |  |  |  |  |  |  |
| Living with both parents | 77.4 | 13.9 | 10.2 | 33.2 | 36.7 | 16.2 | 8.7 | 24.7 | 13.4 | 151 |
| Living with father/not mother | 82.6 | 17.2 | 10.8 | 38.6 | 50.1 | 24.1 | 12.2 | 30.8 | 8.8 | 71 |
| Living with mother/not father | 87.7 | 15.7 | 12.9 | 40.9 | 46.4 | 19.3 | 11.3 | 26.5 | 10.9 | 295 |
| Not living with either parent | 84.0 | 16.7 | 14.7 | 35.6 | 47.7 | 17.9 | 9.0 | 29.9 | 12.7 | 332 |
| Missing | (53.3) | (10.8) | (12.7) | (37.8) | (41.4) | (15.4) | (9.0) | (11.2) | (7.8) | 25 |
| Orphanhood status |  |  |  |  |  |  |  |  |  |  |
| Both parents alive | 84.7 | 17.2 | 13.3 | 38.4 | 47.1 | 19.2 | 9.8 | 26.7 | 12.0 | 552 |
| Mother dead/father alive | 76.2 | 14.5 | 14.2 | 39.1 | 49.2 | 19.1 | 10.0 | 32.9 | 10.2 | 73 |
| Father dead/mother alive | 82.3 | 12.5 | 13.5 | 38.0 | 44.8 | 16.2 | 9.9 | 27.5 | 13.1 | 180 |
| Both parents dead | 79.9 | 14.0 | 7.7 | 24.7 | 29.0 | 18.1 | 11.6 | 26.9 | 7.8 | 69 |
| OVC status |  |  |  |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 80.4 | 13.3 | 12.4 | 35.4 | 42.4 | 17.3 | 10.3 | 28.6 | 11.3 | 322 |
| Vulnerable ${ }^{2}$ | (82.3) | (7.9) | (15.9) | (34.0) | (48.1) | (17.2) | (11.6) | (24.9) | (4.5) | 32 |
| Orphan and vulnerable | * | * | * | * | * | * | * | * | * | 14 |
| Neither orphan nor vulnerable | 84.9 | 17.6 | 13.3 | 38.5 | 46.9 | 18.8 | 9.6 | 26.6 | 12.2 | 533 |
| Total | 83.1 | 15.8 | 12.9 | 37.3 | 45.4 | 18.5 | 10.0 | 27.4 | 11.7 | 874 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ One or both parents dead <br> ${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months |  |  |  |  |  |  |  |  |  |  |

### 18.6 Opinion On Information about HIV/AIDS

Ascertaining youth's opinion on the content of HIV/AIDS information they receive is important for further development of relevant youth messages. Table 18.10 shows that 47 percent of children age 12-14 say that there was too much focus on condoms in the information on HIV/AIDS they had received in the 12 months preceding the survey; 42 percent say that the information was either not enough for them or was confusing. Girls and urban children are more likely than other children to say that the information on HIV/AIDS was too focused on condoms. There are some regional variations with no specific pattern; 58 percent of the children in Manzini feel that the information had too much focus on condoms, and 49 percent of children in Lubombo think that there was not enough information for children. The information was confusing for 46 percent of urban children and 41 percent of rural children.

The table also shows the opinion of children who know about having sex and who report that they have received HIV/AIDS information in the 12 months preceding the survey. Overall, 61 percent think that too much focus was placed on abstinence, and 52 percent think that too much focus was placed on sex. Only 7 percent of children say that the information they received encouraged young people to have sex and 11 percent think that the information taught children that having sex is OK if safe sex is practiced. Again, there are variations across subgroups of children, but there is no specific pattern.

| Table 18.10 Opinion on information about HIV/AIDS |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Among all children age 12-14, percentage who had various opinions about the information on HIV/AIDS that they received in the 12 months preceding the survey, according to background characteristics, Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |  |
|  | Percentage of all children who said that the HIV/AIDS information they had received: |  |  |  |  | Percentage of all children knowing about having sex who said that the HIV/AIDS information they had received : |  |  |  | Number of children knowing about the meaning of sex |
|  |  | Did not |  |  |  |  |  |  |  |  |
| Background characteristic | Had too much focus on condoms | have enough information for children | Was offending or upsetting | Was confusing | Number of children | Had too much focus on abstinence | Had too much focus on sex | Encouraged young people to have sex | Taught children sex is OK if it is safe |  |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Female | 50.8 | 41.0 | 22.6 | 40.4 | 465 | 59.2 | 54.5 | 7.1 | 12.0 | 295 |
| Male | 42.9 | 43.4 | 23.1 | 42.9 | 409 | 63.2 | 49.3 | 7.8 | 10.1 | 241 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 54.8 | 38.6 | 27.0 | 46.0 | 104 | 54.4 | 49.7 | 10.5 | 8.8 | 77 |
| Rural | 46.1 | 42.6 | 22.3 | 41.0 | 769 | 62.1 | 52.6 | 6.9 | 11.6 | 459 |
| Region |  |  |  |  |  |  |  |  |  |  |
| Hhohho | 42.1 | 39.0 | 24.3 | 41.7 | 228 | 64.2 | 48.7 | 6.4 | 13.6 | 123 |
| Manzini | 58.0 | 43.7 | 22.0 | 46.3 | 255 | 61.0 | 63.9 | 10.4 | 9.8 | 159 |
| Shiselweni | 39.9 | 38.2 | 17.5 | 33.9 | 213 | 56.3 | 39.5 | 5.4 | 8.5 | 138 |
| Lubombo | 46.6 | 48.6 | 28.6 | 44.1 | 178 | 63.2 | 54.8 | 6.9 | 13.6 | 116 |
| Living arrangements |  |  |  |  |  |  |  |  |  |  |
| Living with both parents | 41.2 | 41.2 | 20.9 | 39.8 | 151 | 59.5 | 46.0 | 5.0 | 9.3 | 89 |
| Living with father/not mother | 41.7 | 52.5 | 27.1 | 48.5 | 71 | 70.5 | 80.3 | 24.0 | 16.5 | 40 |
| Living with mother/not father | 51.5 | 44.1 | 22.8 | 44.2 | 295 | 63.3 | 48.9 | 7.3 | 10.8 | 189 |
| Not living with either parent | 47.1 | 38.8 | 22.9 | 38.7 | 332 | 58.5 | 52.4 | 5.9 | 12.1 | 204 |
| Missing | (46.3) | (38.8) | (21.9) | (40.8) | 25 | * | * | * | * | 15 |
| Orphanhood status |  |  |  |  |  |  |  |  |  |  |
| Both parents alive | 47.9 | 43.2 | 23.8 | 43.7 | 552 | 59.9 | 52.9 | 7.7 | 12.5 | 337 |
| Mother dead/father alive | 49.0 | 48.4 | 33.8 | 40.8 | 73 | 62.4 | 66.6 | 12.4 | 11.1 | 47 |
| Father dead/mother alive | 47.3 | 39.9 | 21.1 | 37.5 | 180 | 64.9 | 45.7 | 5.5 | 10.0 | 106 |
| Both parents dead | 38.0 | 32.6 | 8.3 | 36.6 | 69 | 58.2 | 47.2 | 4.6 | 3.8 | 46 |
| OVC status |  |  |  |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 45.7 | 40.3 | 21.2 | 38.0 | 322 | 62.8 | 51.0 | 6.9 | 8.9 | 199 |
| Vulnerable ${ }^{2}$ | (45.3) | (46.8) | (32.9) | (33.2) | 32 | * | * | * | * | 15 |
| Orphan and vulnerable | * | * | * | * | 14 | * | * | * | * | 6 |
| Neither orphan nor vulnerable | 47.8 | 42.8 | 23.6 | 44.1 | 533 | 60.9 | 52.3 | 7.9 | 12.9 | 328 |
| Total | 47.1 | 42.1 | 22.8 | 41.6 | 874 | 61.0 | 52.2 | 7.4 | 11.2 | 536 |
| Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed. <br> ${ }^{1}$ One or both parents dead <br> ${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months |  |  |  |  |  |  |  |  |  |  |

### 18.7 KnOWledge of HIV/AIDS Help Line

Table 18.11 is presented to provide information on the knowledge of girls and boys age 12-14 about HIV/AIDS information through telephone. Overall, 18 percent of girls and boys know about HIV/AIDS information by telephone; 22 percent of girls and 12 percent of boys. Among those who know about the HIV/AIDS Help line, 35 percent mention the AIDS help line and 12 percent cite TASC. More than half of these children mention other sources. As expected, children in urban areas and in Manzini are more likely than children living elsewhere to know about the HIV/AIDS information through the HIV/AIDS hotline.

Table 18.11 Knowledge of HIV/AIDS help line
Percentage of girls and boys age 12-14 who know about HIV/AIDS information by telephone or help line, and among those who know about HIV/AIDS telephone or help line, percentage who know specific source of information, according to background characteristics, Swaziland 2006-07

| Background characteristic | Percent who know about HIV/AIDS information by telephone or help line | Number of children | Among those knowing about hotline, percentage mentioning: |  |  | Number of children age 12-14 who know about HIV/AIDS telephone or help line |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | AIDS <br> help line | TASC | Other |  |
| Sex |  |  |  |  |  |  |
| Female | 22.3 | 465 | 33.3 | 13.1 | 56.3 | 104 |
| Male | 12.3 | 409 | 39.5 | 8.6 | 56.0 | 50 |
| Residence |  |  |  |  |  |  |
| Urban | 21.4 | 104 | 49.7 | 18.2 | 40.5 | 22 |
| Rural | 17.1 | 769 | 32.9 | 10.5 | 58.9 | 132 |
| Region |  |  |  |  |  |  |
| Hhohho | 18.2 | 228 | 45.2 | 12.2 | 42.6 | 41 |
| Manzini | 20.6 | 255 | 43.2 | 5.9 | 62.2 | 52 |
| Shiselweni | 11.9 | 213 | 26.2 | 8.7 | 61.0 | 25 |
| Lubombo | 19.6 | 178 | 18.5 | 21.8 | 59.9 | 35 |
| Living arrangements |  |  |  |  |  |  |
| Living with both parents | 17.2 | 151 | 39.4 | 6.2 | 59.3 | 26 |
| Living with father/not mother | 16.5 | 71 | 57.0 | 17.3 | 31.1 | 12 |
| Living with mother/not father | 21.0 | 295 | 30.8 | 10.2 | 63.9 | 62 |
| Not living with either parent | 15.6 | 332 | 35.8 | 13.3 | 50.8 | 52 |
| Missing | (11.6) | 25 | 0.0 | 38.8 | 61.2 | 3 |
| Orphanhood status |  |  |  |  |  |  |
| Both parents alive | 19.4 | 552 | 34.6 | 11.4 | 59.6 | 107 |
| Mother dead/father alive | 14.3 | 73 | 49.5 | 20.1 | 30.4 | 11 |
| Father dead/mother alive | 15.0 | 180 | 26.8 | 9.7 | 59.8 | 27 |
| Both parents dead | 13.7 | 69 | * | * | * | 9 |
| OVC status |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 14.6 | 322 | 37.0 | 12.3 | 48.5 | 47 |
| Vulnerable ${ }^{2}$ | (15.7) | 32 | * | * | * | 5 |
| Orphan and vulnerable | * | 14 | ${ }^{*}$ | * | ${ }^{*}$ | 1 |
| Neither orphan nor vulnerable | 19.3 | 533 | 36.0 | 11.8 | 58.0 | 103 |
| Total | 17.6 | 874 | 35.3 | 11.7 | 56.2 | 154 |

[^28]
### 18.8 Discussion about HIV/AIDS

In the SDHS, children age 12-14 were also asked whether they discussed the topic of HIV/AIDS with their caregiver, parents, friends, or any other person. Table 18.12 provides the results. One in three children had discussed HIV/AIDS with parents or caregivers and 31 percent discussed it with other children. In general, girls and children who live in urban areas are more likely than other children to have discussed HIV/AIDS with anyone. For example, 40 percent of girls say they discuss HIV/AIDS with their parents compared with 25 percent of boys.

## Table 18.12 Discussion about HIV/AIDS

Among children age 12-14, percentage who ever discussed HIV/AIDS with parents/caregivers and with other kids with whom they mix and percentage reporting they had discussed HIV/AIDS with someone in the months before the survey, and, among those discussing HIV/AIDS recently, percentage mentioning they had discussed the topic with specific individuals, according to background characteristics, Swaziland, 2006

| Background characteristic | Ever discussed HIV/AIDS |  | Ever discussed HIV/AIDS with someone during | Number of children | Percentage of children who discussed HIV/AIDS in the past month who mentioned talking about the topic with: |  |  |  | Number of children discussing HIV/AIDS in the past month |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | With parents/ caregiver | With other children | month before survey |  | A parent | Friend | Teacher | Other persons |  |
| Sex |  |  |  |  |  |  |  |  |  |
| Female | 40.2 | 31.0 | 32.9 | 465 | 18.3 | 50.3 | 29.5 | 27.6 | 153 |
| Male | 24.7 | 30.6 | 27.5 | 409 | 7.2 | 69.9 | 29.9 | 14.3 | 112 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 47.7 | 35.5 | 41.1 | 104 | 17.4 | 68.3 | 12.4 | 31.4 | 43 |
| Rural | 30.9 | 30.2 | 28.9 | 769 | 12.8 | 56.7 | 33.0 | 20.2 | 222 |
| Region |  |  |  |  |  |  |  |  |  |
| Hhohho | 35.1 | 27.8 | 28.8 | 228 | 9.8 | 55.7 | 30.8 | 22.6 | 66 |
| Manzini | 36.6 | 30.0 | 37.4 | 255 | 17.6 | 53.8 | 34.0 | 22.7 | 95 |
| Shiselweni | 30.0 | 34.9 | 27.5 | 213 | 17.2 | 58.4 | 24.7 | 19.8 | 59 |
| Lubombo | 28.5 | 30.9 | 25.7 | 178 | 5.9 | 73.0 | 25.5 | 22.2 | 46 |
| Living arrangements |  |  |  |  |  |  |  |  |  |
| Living with both parents | 30.3 | 33.2 | 31.4 | 151 | 13.5 | 65.7 | 30.3 | 15.9 | 47 |
| Living with father/not mother | 25.4 | 25.9 | 18.1 | 71 | 0.0 | 63.2 | 35.4 | 35.1 | 13 |
| Living with mother/not father | 37.0 | 28.6 | 33.8 | 295 | 19.0 | 59.0 | 30.0 | 16.6 | 99 |
| Not living with either parent | 33.3 | 32.5 | 29.1 | 332 | 10.0 | 54.9 | 28.3 | 28.8 | 97 |
| Missing | (17.8) | (33.1) | (34.7) | 25 | * | * | * | * | 9 |
| Orphanhood status |  |  |  |  |  |  |  |  |  |
| Both parents alive | 35.9 | 32.8 | 34.1 | 552 | 15.2 | 59.4 | 29.2 | 20.5 | 188 |
| Mother dead/father alive | 23.1 | 34.8 | 21.0 | 73 | * | * | * | * | 15 |
| Father dead/mother alive | 30.6 | 25.4 | 26.5 | 180 | (11.7) | (57.2) | (33.5) | (18.5) | 48 |
| Both parents dead | 26.0 | 24.1 | 20.2 | 69 | * | * | * | * | 14 |
| OVC status |  |  |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 27.9 | 27.3 | 23.9 | 322 | 9.5 | 56.6 | 30.9 | 25.6 | 77 |
| Vulnerable ${ }^{2}$ | 31.8 | 40.7 | 36.7 | 32 | * | * | * | * | 12 |
| Orphan and vulnerable | * | * | * | 14 | * | * | ${ }^{*}$ | ${ }^{*}$ | 4 |
| Neither orphan nor vulnerable | 35.9 | 32.8 | 33.9 | 533 | 15.9 | 58.4 | 28.8 | 20.9 | 180 |
| Total | 32.9 | 30.8 | 30.4 | 874 | 13.6 | 58.6 | 29.7 | 22.0 | 265 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ One or both parents dead
${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months

When asked if they had discussed the subject in the past month, a majority of children (59 percent) say that they discussed it with a friend, 30 percent discussed it with a teacher, and 22 percent talked with other persons. It is interesting to note that parents are the children's least likely choice of contact to talk about HIV/AIDS (14 percent). Further, girls are much more likely to discuss HIV/AIDS with a parent than boys (18 percent and 7 percent, respectively).

In both urban and rural areas, most children talk about HIV/AIDS with their friends (68 percent in urban areas and 57 percent in rural areas). However, teachers play a much more important role in rural areas as a contact point for information on HIV/AIDS than in urban areas (33 percent compared with 12 percent).

When asked who would they like to discuss HIV/AIDS with, both girls and boys choose their friends ( 32 percent) (Table 18.13). Parents come second ( 26 percent), followed by other relatives ( 20 percent). Only 12 percent mention teachers. Other than friends, girls tend to mention parent or caregiver ( 30 percent) and other relatives (22 percent). Boys are more likely than girls to say that they want to discuss HIV/AIDS with their teacher (15 percent compared

Table 18.13 Persons with whom youth would like to discuss HIV/AIDS

Percentage of children age 12-14 years who mentioned that they would like to discuss HIV/AIDS with various people in the last 12 months by specific individuals, according to sex, Swaziland 2006-07

| Would like to talk <br> about HIV/AIDS with: | Male | Female | Total |
| :--- | :---: | :---: | :---: |
| Parent/caregiver | 22.0 | 29.8 | 26.2 |
| Other relative | 17.8 | 21.6 | 19.8 |
| Friend | 33.3 | 30.3 | 31.7 |
| Teacher | 14.7 | 9.8 | 12.1 |
| Other | 4.5 | 4.1 | 4.3 |
| Number | 409 | 465 | 874 | with 10 percent).

### 18.9 Knowledge of Places to be Tested for the AidS Virus

The survey also investigated whether girls and boys age 12-14 know where one can be tested for the AIDS virus. Overall, only half of children age 12-14 in the survey know of a place for AIDS testing (Table 18.14). Girls are more likely than boys to know where to go for the AIDS testing ( 55 percent compared with 48 percent). Urban children are also more likely than rural children to know a place for AIDS testing ( 65 percent compared with 50 percent).

A government health facility is the most often cited place of testing for the AIDS virus (59 percent), followed by a private or mission facility ( 24 percent), and FLAS/TASC and other NGOs (20 percent). Children in rural areas are much more likely than those in urban areas to mention a government facility ( 64 percent compared with 37 percent).

Table 18.14 Knowledge of place to be tested for AIDS virus
Percentage of girls and boys age 12-14 who know about a place to be tested for the AIDS virus, according to background characteristics, Swaziland 2006-07

| Background characteristic | Percent who know place to be tested for the AIDS virus | Number <br> of <br> children | Among children knowing place to be tested, percentage mentioning: |  |  |  | Number of children who know place to be tested for AIDS virus |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Government facility | Private/ mission facility | FLAS/ <br> TASC/ <br> other <br> NGOs | Other |  |
| Sex |  |  |  |  |  |  |  |
| Female | 54.6 | 465 | 58.5 | 21.0 | 20.4 | 2.5 | 254 |
| Male | 47.5 | 409 | 60.7 | 28.5 | 19.0 | 1.6 | 194 |
| Residence |  |  |  |  |  |  |  |
| Urban | 64.5 | 104 | 36.5 | 33.4 | 38.7 | 0.6 | 67 |
| Rural | 49.5 | 769 | 63.5 | 22.6 | 16.5 | 2.4 | 381 |
| Region |  |  |  |  |  |  |  |
| Hhohho | 51.5 | 228 | 63.4 | 10.0 | 22.6 | 0.8 | 117 |
| Manzini | 53.2 | 255 | 44.1 | 33.8 | 32.4 | 1.7 | 136 |
| Shiselweni | 48.3 | 213 | 86.8 | 3.9 | 6.8 | 2.0 | 103 |
| Lubombo | 51.7 | 178 | 46.3 | 51.2 | 12.2 | 4.6 | 92 |
| Living arrangements |  |  |  |  |  |  |  |
| Living with both parents | 52.2 | 151 | 54.2 | 28.0 | 16.0 | 1.2 | 79 |
| Living with father/not mother | 48.5 | 71 | (59.6) | (19.1) | (18.4) | (8.2) | 34 |
| Living with mother/not father | 52.0 | 295 | 61.5 | 23.2 | 17.3 | 1.4 | 153 |
| Not living with either parent | 51.9 | 332 | 57.8 | 25.8 | 24.5 | 2.1 | 173 |
| Missing | (36.4) | 25 | * | * | * | * | 9 |
| Orphanhood status |  |  |  |  |  |  |  |
| Both parents alive | 53.3 | 552 | 55.9 | 22.1 | 20.6 | 2.2 | 294 |
| Mother dead/father alive | 49.3 | 73 | (73.0) | (26.1) | (9.4) | (5.7) | 36 |
| Father dead/mother alive | 47.9 | 180 | 60.3 | 33.3 | 19.5 | 1.2 | 86 |
| Both parents dead | 45.5 | 69 | (74.4) | (17.4) | (25.3) | (0.0) | 31 |
| OVC status |  |  |  |  |  |  |  |
| Orphan ${ }^{1}$ | 47.7 | 322 | 66.2 | 28.3 | 18.3 | 2.0 | 154 |
| Vulnerable ${ }^{2}$ | (45.7) | 32 | * | * | * | * | 15 |
| Orphan and vulnerable | * | 14 | * | * | * | * | 5 |
| Neither orphan nor vulnerable | 53.4 | 533 | 56.4 | 20.9 | 20.9 | 2.3 | 285 |
| Total | 51.3 | 874 | 59.4 | 24.2 | 19.8 | 2.1 | 448 |

[^29]
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Table A. 1 Sample implementation: Women 15-49
Percent distribution of households and eligible women 15-49 by results of the household and individual interviews, and household, eligible women 15-49 and overall women 15-49 response rates, according to urban-rural residence and region (unweighted), Swaziland 2006-07

| Result | Residence |  | Region |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Hhohho | Manzini | Shiselweni | Lubombo |  |
| Selected households |  |  |  |  |  |  |  |
| Completed (C) | 84.7 | 90.3 | 85.5 | 86.3 | 89.5 | 91.9 | 88.1 |
| Household present but no competent respondent at home (HP) | 0.9 | 1.2 | 1.3 | 1.4 | 0.9 | 0.4 | 1.0 |
| Postponed (P) | 0.3 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.2 |
| Refused (R) | 5.2 | 1.5 | 4.6 | 3.9 | 1.5 | 1.4 | 3.0 |
| Dwelling not found (DNF) | 0.3 | 0.1 | 0.4 | 0.3 | 0.0 | 0.0 | 0.2 |
| Household absent (HA) | 2.1 | 1.9 | 2.4 | 1.6 | 2.8 | 1.3 | 2.0 |
| Dwelling vacant/address not a dwelling (DV) | 5.6 | 3.9 | 4.7 | 5.3 | 3.8 | 4.3 | 4.6 |
| Dwelling destroyed (DD) | 0.7 | 0.8 | 0.7 | 0.8 | 1.2 | 0.4 | 0.8 |
| Other (O) | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 2,220 | 3,280 | 1,500 | 1,580 | 1,080 | 1,340 | 5,500 |
| Household response rate (HRR) | 92.7 | 96.9 | 93.0 | 93.5 | 97.3 | 97.9 | 95.2 |
| Eligible women |  |  |  |  |  |  |  |
| Completed (EWC) | 91.8 | 95.1 | 93.1 | 92.8 | 96.0 | 95.0 | 94.1 |
| Not at home (EWNH) | 2.9 | 2.0 | 2.4 | 3.1 | 1.2 | 2.0 | 2.3 |
| Postponed (EWP) | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| Refused (EWR) | 4.5 | 1.5 | 3.1 | 3.0 | 1.8 | 1.7 | 2.5 |
| Partly completed (EWPC) | 0.3 | 0.1 | 0.0 | 0.3 | 0.0 | 0.3 | 0.2 |
| Incapacitated (EWI) | 0.3 | 1.1 | 1.1 | 0.4 | 1.0 | 0.9 | 0.8 |
| Other (EWO) | 0.2 | 0.1 | 0.4 | 0.3 | 0.0 | 0.0 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 1,682 | 3,619 | 1,357 | 1,589 | 1,128 | 1,227 | 5,301 |
| Eligible women response rate (EWRR) | 91.8 | 95.1 | 93.1 | 92.8 | 96.0 | 95.0 | 94.1 |
| Overall response rate (ORR) | 85.1 | 92.2 | 86.6 | 86.8 | 93.4 | 93.1 | 89.6 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100 * C}{C+H P+P+R+D N F}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$
\frac{100 * E W C}{E W C+E W N H+E W P+E W R+E W P C+E W I+E W O}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as:
ORR $=H R R * E W R R / 100$

Table A. 2 Sample implementation: Men 15-49
Percent distribution of households and eligible men 15-49 by results of the household and individual interviews, and household, eligible men 15-49 and overall men 15-49 response rates, according to urban-rural residence and region (unweighted) Swaziland 2006-07

| Result | Residence |  | Region |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Hhohho | Manzini | Shiselweni | Lubombo |  |
| Selected households |  |  |  |  |  |  |  |
| Completed (C) | 84.7 | 90.3 | 85.5 | 86.3 | 89.5 | 91.9 | 88.1 |
| Household present but no competent respondent at home (HP) | 0.9 | 1.2 | 1.3 | 1.4 | 0.9 | 0.4 | 1.0 |
| Postponed (P) | 0.3 | 0.1 | 0.1 | 0.3 | 0.1 | 0.1 | 0.2 |
| Refused (R) | 5.2 | 1.5 | 4.6 | 3.9 | 1.5 | 1.4 | 3.0 |
| Dwelling not found (DNF) | 0.3 | 0.1 | 0.4 | 0.3 | 0.0 | 0.0 | 0.2 |
| Household absent (HA) | 2.1 | 1.9 | 2.4 | 1.6 | 2.8 | 1.3 | 2.0 |
| Dwelling vacant/address not a dwelling (DV) | 5.6 | 3.9 | 4.7 | 5.3 | 3.8 | 4.3 | 4.6 |
| Dwelling destroyed (DD) | 0.7 | 0.8 | 0.7 | 0.8 | 1.2 | 0.4 | 0.8 |
| Other (O) | 0.2 | 0.2 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 2,220 | 3,280 | 1,500 | 1,580 | 1,080 | 1,340 | 5,500 |
| Household response rate (HRR) | 92.7 | 96.9 | 93.0 | 93.5 | 97.3 | 97.9 | 95.2 |
| Eligible men |  |  |  |  |  |  |  |
| Completed (EMC) | 88.0 | 89.4 | 88.8 | 86.8 | 88.7 | 91.5 | 88.9 |
| Not at home (EMNH) | 4.2 | 4.4 | 3.8 | 5.8 | 3.6 | 3.9 | 4.4 |
| Postponed (EMP) | 0.0 | 0.2 | 0.3 | 0.0 | 0.1 | 0.1 | 0.1 |
| Refused (EMR) | 7.0 | 4.3 | 5.9 | 6.1 | 5.5 | 3.4 | 5.2 |
| Partly completed (EMPC) | 0.2 | 0.3 | 0.2 | 0.4 | 0.2 | 0.2 | 0.3 |
| Incapacitated (EMI) | 0.5 | 1.4 | 1.0 | 1.0 | 1.9 | 0.9 | 1.1 |
| Other (EMO) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of men | 1,638 | 3,037 | 1,147 | 1,367 | 945 | 1,216 | 4,675 |
| Eligible men response rate (EMRR) | 88.0 | 89.4 | 88.8 | 86.8 | 88.7 | 91.5 | 88.9 |
| Overall response rate (ORR) | 81.6 | 86.6 | 82.7 | 81.2 | 86.3 | 89.6 | 84.7 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100^{*} \mathrm{C}}{\mathrm{C}+\mathrm{HP}+\mathrm{P}+\mathrm{R}+\mathrm{DNF}}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$
\frac{100 * E M C}{E M C+E M N H+E M P+E M R+E M P C+E M I+E M O}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as:
ORR = HRR * EMRR/100

## Table A. 3 Sample implementation: Girls 12-14

Percent distribution of households and eligible girls by results of the household and individual interviews, and household, eligible girls and overall response rates for girls, according to urban-rural residence and region (unweighted) Swaziland 2006-07

| Result | Residence |  | Region |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Hhohho | Manzini | Shiselweni | Lubombo |  |
| Selected households |  |  |  |  |  |  |  |
| Completed (C) | 84.4 | 89.8 | 84.1 | 86.7 | 89.8 | 90.9 | 87.6 |
| Household present but no competent respondent at home (HP) | 0.9 | 1.1 | 1.3 | 1.4 | 0.7 | 0.4 | 1.0 |
| Postponed (P) | 0.3 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 |
| Refused (R) | 5.9 | 1.8 | 5.6 | 4.1 | 1.7 | 1.6 | 3.4 |
| Dwelling not found (DNF) | 0.5 | 0.1 | 0.7 | 0.1 | 0.0 | 0.0 | 0.2 |
| Household absent (HA) | 2.3 | 2.1 | 3.1 | 1.5 | 2.4 | 1.6 | 2.1 |
| Dwelling vacant/address not a dwelling (DV) | 5.2 | 4.0 | 4.3 | 5.1 | 3.7 | 4.8 | 4.5 |
| Dwelling destroyed (DD) | 0.5 | 0.9 | 0.7 | 0.6 | 1.1 | 0.4 | 0.7 |
| Other (O) | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 | 0.0 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 1,110 | 1,640 | 750 | 790 | 540 | 670 | 2,750 |
| Household response rate (HRR) | 91.9 | 96.7 | 91.6 | 93.7 | 97.2 | 97.6 | 94.8 |
| Eligible girls 12-14 |  |  |  |  |  |  |  |
| Completed (EGC) | 96.2 | 96.2 | 95.0 | 97.0 | 97.3 | 95.5 | 96.2 |
| Not at home (EGNH) | 2.6 | 2.3 | 1.7 | 3.0 | 2.7 | 1.8 | 2.3 |
| Parent refused (EGPR) | 1.3 | 0.5 | 0.8 | 0.0 | 0.0 | 1.8 | 0.6 |
| Youth refused (EGR) | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.9 | 0.2 |
| Incapacitated (EGI) | 0.0 | 0.8 | 2.5 | 0.0 | 0.0 | 0.0 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of girls 12-14 | 78 | 399 | 119 | 134 | 113 | 111 | 477 |
| Eligible girls 12-14 response rate (EGRR) | 96.2 | 96.2 | 95.0 | 97.0 | 97.3 | 95.5 | 96.2 |
| Overall response rate (ORR) | 88.3 | 93.1 | 87.0 | 90.9 | 94.6 | 93.2 | 91.2 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100 * \mathrm{C}}{\mathrm{C}+\mathrm{HP}+\mathrm{P}+\mathrm{R}+\mathrm{DNF}}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$
\frac{100 * E G C}{E G C+E G N H+E G P R+E G R+E G I}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as:

$$
\mathrm{ORR}=\mathrm{HRR} * \mathrm{EGRR} / 100
$$

| Table A. 4 Sample implementation: Boys 12-14 |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percent distribution of households and eligible boys by results of the household and individual interviews, and household, eligible boys and overall response rates for boys, according to urban-rural residence and region (unweighted) Swaziland 2006-07 |  |  |  |  |  |  |  |
| Result | Residence |  | Region |  |  |  | Total |
|  | Urban | Rural | Hhohho | Manzini | Shiselweni | Lubombo |  |
| Selected households |  |  |  |  |  |  |  |
| Completed (C) | 84.4 | 89.8 | 84.1 | 86.7 | 89.8 | 90.9 | 87.6 |
| Household present but no competent respondent at home (HP) | 0.9 | 1.1 | 1.3 | 1.4 | 0.7 | 0.4 | 1.0 |
| Postponed (P) | 0.3 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 |
| Refused (R) | 5.9 | 1.8 | 5.6 | 4.1 | 1.7 | 1.6 | 3.4 |
| Dwelling not found (DNF) | 0.5 | 0.1 | 0.7 | 0.1 | 0.0 | 0.0 | 0.2 |
| Household absent (HA) | 2.3 | 2.1 | 3.1 | 1.5 | 2.4 | 1.6 | 2.1 |
| Dwelling vacant/address not a dwelling (DV) | 5.2 | 4.0 | 4.3 | 5.1 | 3.7 | 4.8 | 4.5 |
| Dwelling destroyed (DD) | 0.5 | 0.9 | 0.7 | 0.6 | 1.1 | 0.4 | 0.7 |
| Other (O) | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 | 0.0 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 1,110 | 1,640 | 750 | 790 | 540 | 670 | 2,750 |
| Household response rate (HRR) | 91.9 | 96.7 | 91.6 | 93.7 | 97.2 | 97.6 | 94.8 |
| Eligible boys 12-14 |  |  |  |  |  |  |  |
| Completed (EBC) | 88.7 | 94.4 | 94.0 | 95.7 | 90.5 | 94.0 | 93.6 |
| Not at home (EBNH) | 3.2 | 2.4 | 1.7 | 1.7 | 5.7 | 1.0 | 2.5 |
| Parent refused (EBPR) | 4.8 | 1.1 | 3.4 | 0.9 | 0.0 | 2.0 | 1.6 |
| Refused (EBR) | 1.6 | 0.8 | 0.0 | 0.9 | 1.9 | 1.0 | 0.9 |
| Partly completed (EBPC) | 1.6 | 0.8 | 0.9 | 0.9 | 1.9 | 0.0 | 0.9 |
| Incapacitated (EBI) | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 2.0 | 0.5 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of boys 12-14 | 62 | 377 | 117 | 117 | 105 | 100 | 439 |
| Eligible boys 12-14 response rate (EBRR) | 88.7 | 94.4 | 94.0 | 95.7 | 90.5 | 94.0 | 93.6 |
| Overall response rate (ORR) | 81.5 | 91.3 | 86.1 | 89.7 | 87.9 | 91.7 | 88.7 |
| ${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as: |  |  |  |  |  |  |  |
| 100 * C |  |  |  |  |  |  |  |
| $\mathrm{C}+\mathrm{HP}+\mathrm{P}+\mathrm{R}+\mathrm{DNF}$ |  |  |  |  |  |  |  |
| ${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as: |  |  |  |  |  |  |  |
| 100 * EBC |  |  |  |  |  |  |  |
| $E B C+E B N H+E B P R+E B R+E B P C+E B I$ |  |  |  |  |  |  |  |
| ${ }^{3}$ The overall response rate (ORR) is calculated as: |  |  |  |  |  |  |  |
| $\mathrm{ORR}=\mathrm{HRR} * E B R R / 100$ |  |  |  |  |  |  |  |

Table A. 5 Sample implementation: Women age 50+
Percent distribution of households and eligible women 50 and older by results of the household and individual interviews, and household, eligible women 50 and older and overall response rates for women 50 and older, according to urban-rural residence and region (unweighted) Swaziland 2006-07

| Result | Residence |  | Region |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Hhohho | Manzini | Shiselweni | Lubombo |  |
| Selected households |  |  |  |  |  |  |  |
| Completed (C) | 84.4 | 89.8 | 84.1 | 86.7 | 89.8 | 90.9 | 87.6 |
| Household present but no competent respondent at home (HP) | 0.9 | 1.1 | 1.3 | 1.4 | 0.7 | 0.4 | 1.0 |
| Postponed (P) | 0.3 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 |
| Refused (R) | 5.9 | 1.8 | 5.6 | 4.1 | 1.7 | 1.6 | 3.4 |
| Dwelling not found (DNF) | 0.5 | 0.1 | 0.7 | 0.1 | 0.0 | 0.0 | 0.2 |
| Household absent (HA) | 2.3 | 2.1 | 3.1 | 1.5 | 2.4 | 1.6 | 2.1 |
| Dwelling vacant/address not a dwelling (DV) | 5.2 | 4.0 | 4.3 | 5.1 | 3.7 | 4.8 | 4.5 |
| Dwelling destroyed (DD) | 0.5 | 0.9 | 0.7 | 0.6 | 1.1 | 0.4 | 0.7 |
| Other (O) | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 | 0.0 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 1,110 | 1,640 | 750 | 790 | 540 | 670 | 2,750 |
| Household response rate (HRR) | 91.9 | 96.7 | 91.6 | 93.7 | 97.2 | 97.6 | 94.8 |
| Eligible women age 50+ |  |  |  |  |  |  |  |
| Completed (EW50C) | 91.2 | 96.2 | 94.6 | 95.1 | 95.9 | 96.1 | 95.4 |
| Not at home (EW50NH) | 0.9 | 0.7 | 0.6 | 0.0 | 1.5 | 0.8 | 0.7 |
| Refused (EW50R) | 6.1 | 0.7 | 3.0 | 1.5 | 0.5 | 1.6 | 1.6 |
| Incapacitated (EW50I) | 1.8 | 2.4 | 1.8 | 3.4 | 2.1 | 1.6 | 2.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women age 50+ | 114 | 579 | 167 | 203 | 194 | 129 | 693 |
| Eligible women age 50+ response rate (EW50RR) | 91.2 | 96.2 | 94.6 | 95.1 | 95.9 | 96.1 | 95.4 |
| Overall response rate (ORR) | 83.8 | 93.0 | 86.6 | 89.1 | 93.2 | 93.8 | 90.4 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100 * C}{C+H P+P+R+D N F}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$
\frac{100 * \text { EW50C }}{\text { EW50C }+ \text { EW50NH }+ \text { EW50R }+ \text { EW50I }}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as:

$$
\text { ORR }=\text { HRR * EW50RR/100 }
$$

Table A. 6 Sample implementation: Men age 50+
Percent distribution of households and eligible men 50 and older by results of the household and individual interviews, and household, eligible men 50 and older and overall response rates for men 50 and older, according to urban-rural residence and region (unweighted) Swaziland 2006-07

| Result | Residence |  | Region |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Rural | Hhohho | Manzini | Shiselweni | Lubombo |  |
| Selected households |  |  |  |  |  |  |  |
| Completed (C) | 84.4 | 89.8 | 84.1 | 86.7 | 89.8 | 90.9 | 87.6 |
| Household present but no competent respondent at home (HP) | 0.9 | 1.1 | 1.3 | 1.4 | 0.7 | 0.4 | 1.0 |
| Postponed (P) | 0.3 | 0.1 | 0.1 | 0.3 | 0.2 | 0.1 | 0.2 |
| Refused (R) | 5.9 | 1.8 | 5.6 | 4.1 | 1.7 | 1.6 | 3.4 |
| Dwelling not found (DNF) | 0.5 | 0.1 | 0.7 | 0.1 | 0.0 | 0.0 | 0.2 |
| Household absent (HA) | 2.3 | 2.1 | 3.1 | 1.5 | 2.4 | 1.6 | 2.1 |
| Dwelling vacant/address not a dwelling (DV) | 5.2 | 4.0 | 4.3 | 5.1 | 3.7 | 4.8 | 4.5 |
| Dwelling destroyed (DD) | 0.5 | 0.9 | 0.7 | 0.6 | 1.1 | 0.4 | 0.7 |
| Other (O) | 0.2 | 0.2 | 0.1 | 0.3 | 0.4 | 0.0 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 1,110 | 1,640 | 750 | 790 | 540 | 670 | 2,750 |
| Household response rate (HRR) | 91.9 | 96.7 | 91.6 | 93.7 | 97.2 | 97.6 | 94.8 |
| Eligible men age 50+ |  |  |  |  |  |  |  |
| Completed (EM50C) | 86.5 | 94.5 | 91.2 | 91.7 | 98.0 | 90.7 | 92.7 |
| Not at home (EM50NH) | 4.5 | 1.6 | 1.5 | 4.1 | 0.0 | 2.8 | 2.2 |
| Refused (EM50R) | 7.2 | 1.0 | 3.6 | 0.7 | 1.0 | 4.6 | 2.4 |
| Partly completed (EM50PR) | 0.0 | 0.3 | 0.0 | 0.7 | 0.0 | 0.0 | 0.2 |
| Incapacitated (EM50I) | 1.8 | 2.6 | 3.6 | 2.8 | 1.0 | 1.9 | 2.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of men age 50+ | 111 | 381 | 137 | 145 | 102 | 108 | 492 |
| Eligible men age 50+ response rate) (EM50RR) | 86.5 | 94.5 | 91.2 | 91.7 | 98.0 | 90.7 | 92.7 |
| Overall response rate (ORR) | 79.4 | 91.4 | 83.6 | 86.0 | 95.3 | 88.6 | 87.8 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
\frac{100 * \mathrm{C}}{\mathrm{C}+\mathrm{HP}+\mathrm{P}+\mathrm{R}+\mathrm{DNF}}
$$

${ }^{2}$ Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$
\frac{100 * E M 50 C}{E M 50 C+E M 50 N H+E M 50 R+E M 50 I}
$$

${ }^{3}$ The overall response rate (ORR) is calculated as:

$$
\mathrm{ORR}=\mathrm{HRR} * \mathrm{EM} 50 \mathrm{RR} / 100
$$

## ESTIMATES OF SAMPLING ERRORS

The estimates from a sample survey are affected by two types of errors: (1) non-sampling errors, and (2) sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2006-07 Swaziland Demographic and Health Survey (SDHS) to minimize this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2006-07 SDHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2006-07 SDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2006-07 SDHS is the ISSA Sampling Error Module. This module used the Taylor linearization method of variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r=y / x$, where $y$ represents the total sample value for variable $y$, and $x$ represents the total number of cases in the group or subgroup under consideration. The variance of $r$ is computed using the formula given below, with the standard error being the square root of the variance:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1-f}{x^{2}} \sum_{h=1}^{H}\left[\frac{m_{h}}{m_{h}-1}\left(\sum_{i=1}^{m_{h}} z_{h i}^{2}-\frac{z_{h}^{2}}{m_{h}}\right)\right]
$$

in which

$$
z_{h i}=y_{h i}-r x_{h i}, \text { and } z_{h}=y_{h}-r x_{h}
$$

where $h \quad$ represents the stratum which varies from 1 to $H$,
$m_{h} \quad$ is the total number of clusters selected in the $h^{\text {th }}$ stratum,
$y_{h i} \quad$ is the sum of the weighted values of variable $y$ in the $i^{\text {th }}$ cluster in the $h^{\text {th }}$ stratum,
$x_{h i} \quad$ is the sum of the weighted number of cases in the $i^{\text {th }}$ cluster in the $h^{\text {th }}$ stratum, and
$f \quad$ is the overall sampling fraction, which is so small that it is ignored.
The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers all but one cluster in the calculation of the estimates. Pseudoindependent replications are thus created. In the 2006-07 NDHS, there were 275 non-empty clusters. Hence, 275 replications were created. The variance of a rate $r$ is calculated as follows:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1}{k(k-1)} \sum_{i=1}^{k}\left(r_{i}-r\right)^{2}
$$

in which

$$
r_{i}=k r-(k-1) r_{(i)}
$$

where $r$ is the estimate computed from the full sample of 275 clusters,
$r_{(i)} \quad$ is the estimate computed from the reduced sample of 274 clusters ( $i^{\text {th }}$ cluster excluded), and
$k \quad$ is the total number of clusters.
In addition to the standard error, ISSA computes the design effect (DEFT) for each estimate, which is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. ISSA also computes the relative error and confidence limits for the estimates.

Sampling errors for the 2006-07 SDHS are calculated for selected variables considered to be of primary interest for woman's survey and for man's surveys, respectively. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for each of the eleven regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B. 2 to B. 8 present the value of the statistic (R), its standard error (SE), the number of unweighted (N-UNWE) and weighted (N-WEIG) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits ( $\mathrm{R} \pm 2 \mathrm{SE}$ ), for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1 ). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to child-bearing.

The confidence interval (e.g., as calculated for children ever born to women aged 40-49) can be interpreted as follows: the overall average from the national sample is 5.339 and its standard error is 0.118 . Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $5.339 \pm 2 \times 0.118$. There is a high probability ( 95 percent) that the true average number of children ever born to all women aged 40 to 49 is between 5.103 and 5.575.

Sampling errors are analyzed for two separate groups of estimates: (1) means and proportions, and (2) complex demographic rates. At the national level, mostly relative standard error values (SE/R) for the means and proportions are below 10 percent, however the highest relative standard error values are for indicators with very low values (i.e. less than 2 percent). So in general, the relative standard errors for most estimates for the country as a whole are small, except for indicators with very small values, i.e. for estimates which are rare in the population. For example, the relative standard error for the total fertility rate (TFR 0-3 years) is small (2.9 percent) since births are a fairly common event. However, for the mortality rates which are rarer events, the average relative standard error value is higher; for example, the relative standard error for the 0-4 year estimate of mortality rates is 9.4 percent.

The relative standard error varies across sub-populations. For example, for the variable children ever born to women aged 40-49, the relative standard errors as a percent of the estimated mean for the whole country, for the urban areas and for the rural areas are 2.2 percent, 4.2 percent and 2.5 percent, respectively.

For the total sample, the value of the design effect (DEFT), averaged over all selected variables, is 1.15 which means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.15 over that in an equivalent simple random sample.

| Variable | Estimate | Base population |
| :---: | :---: | :---: |
| WOMEN |  |  |
| Urban residence | Proportion | All women 15-49 |
| Literate | Proportion | All women 15-49 |
| No education | Proportion | All women 15-49 |
| Secondary education or higher | Proportion | All women 15-49 |
| Net attendance ratio for primary school | Ratio | Children 7-12 years |
| Never married | Proportion | All women 15-49 |
| Currently in union | Proportion | All women 15-49 |
| Married before age 20 | Proportion | Women age 20-49 |
| Had sexual intercourse before age 18 | Proportion | Women age 20-49 |
| Currently pregnant | Mean | All women 15-49 |
| Children ever born | Mean | All women 15-49 |
| Children surviving | Mean | All women 15-49 |
| Children ever born to women age 40-49 | Mean | Women 40-49 |
| Knows any contraceptive method | Proportion | All women 15-49 |
| Ever using contraceptive method | Proportion | All women 15-49 |
| Currently using any contraceptive method | Proportion | All women 15-49 |
| Currently using pill | Proportion | All women 15-49 |
| Currently using IUD | Proportion | All women 15-49 |
| Currently using female sterilisation | Proportion | All women 15-49 |
| Currently using rythm method | Proportion | All women 15-49 |
| Obtained method from public sector source | Proportion | All users |
| Want no more children | Proportion | All women 15-49 |
| Want to delay birth at least 2 years | Proportion | All women 15-49 |
| Ideal family size | Mean | All women 15-49 |
| Perinatal mortality (0-4 years) | Ratio | Number of pregnancies of 7+ months |
| Mothers received tetanus injection for last birth | Proportion | Women with at least one live birth in past 5 years |
| Mothers received medical assistance at delivery | Proportion | Births in past five years |
| Had diarrhoea in two weeks before survey | Proportion | Children 0-59 months |
| Treated with oral rehydration salts (ORS) | Proportion | Children with diarrhoea in past 2 weeks |
| Taken to a health provider | Proportion | Children with diarrhoea in past 2 weeks |
| Vaccination card seen | Proportion | Children 12-23 months |
| Received BCG | Proportion | Children 12-23 months |
| Received DPT (3 doses) | Proportion | Children 12-23 months |
| Received polio (3 doses) | Proportion | Children 12-23 months |
| Received measles | Proportion | Children 12-23 months |
| Fully immunized | Proportion | Children 12-23 months |
| Height-for-age (below -2SD) | Proportion | Children 0-59 months |
| Weight-for-height (below -2SD) | Proportion | Children 0-59 months |
| Weight-for-age (below -2SD) | Proportion | Children 0-59 months |
| Anaemia in children | Proportion | Children 0-59 months |
| Anaemia in women | Proportion | All women 15-49 |
| BMI <18.5 | Proportion | All women 15-49 |
| Use condom at last high-risk sex | Proportion | All women who has intercourse in past 12 months |
| Use condom at last high-risk sex (15-24) | Proportion | Women 15-24 who has intercourse in past 12 months |
| Had High risk Intercourse | Proportion | All women who has intercourse in past 12 months |
| Abstinence among youth (never had sex) | Proportion | All women 15-24 |
| Sexually active past 12 months never married youth | Proportion | All women 15-24 |
| Had injection past 12 months | Proportion | All women |
| Accepting attitudes to people with HIV | Proportion | All women who have heard of HIV/AIDS |
| HIV test and result in past 12 months | Proportion | All women |
| Total fertility rate (past 3 years) | Rate | All women |
| Neonatal mortality (past 5 years) | Rate | Children exposed to the risk of mortality |
| Post-neonatal mortality (past 5 years) | Rate | Children exposed to the risk of mortality |
| Infant mortality (past 5 years) | Rate | Children exposed to the risk of mortality |
| Child mortality (past 5 years) | Rate | Children exposed to the risk of mortality |
| Under-five mortality (past 5 years) | Rate | Children exposed to the risk of mortality |
| HIV prevalence (15-49) | Proportion | All women 15-49 tested for HIV |
| HIV prevalence for pregnant women (15-49) | Proportion | All pregnant women 15-49 tested for HIV |
| HIV prevalence ( $15-24$ ) | Proportion | All women 15-24 tested for HIV Continued... |

Table B.1-Continued

| Variable | Estimate | Base population |
| :---: | :---: | :---: |
|  |  |  |
| Urban residence | Proportion | All men 15-49 |
| Literate | Proportion | All men 15-49 |
| No education | Proportion | All men 15-49 |
| Secondary education or higher | Proportion | All men 15-49 |
| Never married | Proportion | All men 15-49 |
| Currently married/in union | Proportion | All men 15-49 |
| Married before age 20 | Proportion | Men 20-49 |
| Had sexual intercourse before 18 | Proportion | Men 20-49 |
| Children ever born | Mean | Currently married men |
| Ever used any contraceptive method | Proportion | Currently married men |
| Knows any contraceptive method | Proportion | Currently married men |
| Want no more children | Proportion | Currently married men |
| Want to delay birth at least 2 years | Proportion | Currently married men |
| Ideal family size | Mean | All men 15-49 |
| Use condom at last high-risk sex | Proportion | All men 15-49 with high risk intercourse |
| Condom use last higher-risk intercourse (youth) | Proportion | Men 15-24 with high risk intercourse |
| Abstinence among youth (Never had intercourse) | Proportion | Men 15-24 |
| Sexual active past 12 months (never married youth) | Proportion | Men 15-24 |
| Had injection past 12 months | Proportion | All men 15-49 |
| Accepting attitudes to people with HIV | Proportion | All men 15-49 |
| HIV test and result in past 12 months | Proportion | All men 15-49 |
| Multipartners in past 12 months | Proportion | All men 15-49 with $2+$ sexual partners in past 12 months |
| Paid for sex past 12 months | Proportion | All men 15-49 |
| HIV prevalence (15-49) | Proportion | All men 15-49 tested for HIV |
| HIV prevalence (15-24) | Proportion | All men 15-24 tested for HIV |
| Paid for sex past 12 months | Proportion | All men 15-49 |
| HIV prevalence (15-49) | Proportion | All men 15-49 tested for HIV |
| HIV prevalence (15-24) | Proportion | All men 15-24 tested for HIV |
| WOMEN AND MEN |  |  |
| HIV prevalence (15-49) | Proportion | All women and men 15-49 tested for HIV |
| HIV prevalence (15-24) | Proportion | All women and men 15-24 tested for HIV |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.267 | 0.013 | 4987 | 4987 | 2.066 | 0.049 | 0.241 | 0.293 |
| Literate | 0.913 | 0.005 | 4987 | 4987 | 1.197 | 0.005 | 0.904 | 0.923 |
| No education | 0.081 | 0.004 | 4987 | 4987 | 1.131 | 0.054 | 0.072 | 0.089 |
| Secondary education or higher | 0.593 | 0.010 | 4987 | 4987 | 1.461 | 0.017 | 0.573 | 0.613 |
| Net attendance ratio for primary school | 0.842 | 0.009 | 4322 | 4524 | 1.356 | 0.010 | 0.825 | 0.860 |
| Never married | 0.499 | 0.008 | 4987 | 4987 | 1.061 | 0.015 | 0.484 | 0.514 |
| Currently married/in union | 0.413 | 0.008 | 4987 | 4987 | 1.099 | 0.019 | 0.398 | 0.429 |
| Married before age 20 | 0.225 | 0.008 | 3722 | 3713 | 1.197 | 0.036 | 0.209 | 0.241 |
| Had sexual intercourse before age 18 | 0.490 | 0.010 | 3722 | 3713 | 1.194 | 0.020 | 0.471 | 0.510 |
| Currently pregnant | 0.056 | 0.004 | 4987 | 4987 | 1.131 | 0.066 | 0.049 | 0.063 |
| Children ever born | 2.283 | 0.039 | 4987 | 4987 | 1.104 | 0.017 | 2.205 | 2.360 |
| Children surviving | 2.055 | 0.034 | 4987 | 4987 | 1.081 | 0.017 | 1.986 | 2.124 |
| Children ever born to women age 40-49 | 5.339 | 0.118 | 825 | 820 | 1.184 | 0.022 | 5.103 | 5.575 |
| Knows any contraceptive method | 0.999 | 0.000 | 2069 | 2062 | 0.830 | 0.000 | 0.998 | 1.000 |
| Ever using contraceptive method | 0.892 | 0.008 | 2069 | 2062 | 1.205 | 0.009 | 0.876 | 0.908 |
| Currently using any contraceptive method | 0.506 | 0.012 | 2069 | 2062 | 1.062 | 0.023 | 0.483 | 0.530 |
| Currently using pill | 0.099 | 0.007 | 2069 | 2062 | 1.037 | 0.069 | 0.085 | 0.112 |
| Currently using IUD | 0.014 | 0.003 | 2069 | 2062 | 0.967 | 0.178 | 0.009 | 0.019 |
| Currently using female sterilization | 0.058 | 0.006 | 2069 | 2062 | 1.131 | 0.101 | 0.046 | 0.069 |
| Currently using rhythm method | 0.003 | 0.001 | 2069 | 2062 | 1.051 | 0.444 | 0.000 | 0.005 |
| Obtained method from public-sector source | 0.446 | 0.015 | 1805 | 1771 | 1.259 | 0.033 | 0.417 | 0.476 |
| Want no more children | 0.682 | 0.012 | 2069 | 2062 | 1.201 | 0.018 | 0.658 | 0.707 |
| Want to delay birth at least 2 years | 0.151 | 0.008 | 2069 | 2062 | 1.023 | 0.053 | 0.135 | 0.167 |
| Ideal family size | 2.521 | 0.028 | 4952 | 4951 | 1.319 | 0.011 | 2.466 | 2.577 |
| Perinatal mortality (0-4 years) . | 29.373 | 3.266 | 2852 | 2864 | 0.983 | 0.111 | 22.841 | 35.904 |
| Mothers received tetanus injection for last birth | 0.676 | 0.012 | 2136 | 2134 | 1.158 | 0.017 | 0.653 | 0.699 |
| Mothers received medical assistance at delivery | 0.743 | 0.011 | 2812 | 2829 | 1.189 | 0.015 | 0.721 | 0.765 |
| Had diarrhoea in two weeks before survey | 0.134 | 0.008 | 2537 | 2553 | 1.204 | 0.063 | 0.117 | 0.151 |
| Treated with oral rehydration salts (ORS) | 0.855 | 0.021 | 347 | 343 | 1.052 | 0.024 | 0.814 | 0.896 |
| Taken to a health provider | 0.719 | 0.033 | 347 | 343 | 1.312 | 0.046 | 0.653 | 0.786 |
| Vaccination card seen | 0.841 | 0.016 | 538 | 531 | 0.976 | 0.019 | 0.810 | 0.872 |
| Received BCG | 0.972 | 0.008 | 538 | 531 | 1.100 | 0.008 | 0.956 | 0.988 |
| Received DPT (3 doses) | 0.917 | 0.012 | 538 | 531 | 0.982 | 0.013 | 0.893 | 0.940 |
| Received polio (3 doses) | 0.873 | 0.014 | 538 | 531 | 0.964 | 0.016 | 0.845 | 0.901 |
| Received measles | 0.915 | 0.014 | 538 | 531 | 1.144 | 0.015 | 0.887 | 0.943 |
| Fully immunized | 0.817 | 0.018 | 538 | 531 | 1.042 | 0.022 | 0.782 | 0.853 |
| Height-for-age (below -2SD) | 0.289 | 0.010 | 2771 | 2940 | 1.136 | 0.035 | 0.269 | 0.309 |
| Weight-for-height (below -2SD) | 0.025 | 0.003 | 2771 | 2940 | 0.999 | 0.120 | 0.019 | 0.031 |
| Weight-for-age (below-2SD) | 0.054 | 0.004 | 2771 | 2940 | 0.924 | 0.072 | 0.046 | 0.062 |
| Anaemia in children | 0.418 | 0.013 | 2521 | 2681 | 1.310 | 0.030 | 0.393 | 0.444 |
| Anaemia in women | 0.304 | 0.008 | 4595 | 4598 | 1.115 | 0.025 | 0.289 | 0.319 |
| $\mathrm{BMI}<18.5$ | 0.032 | 0.003 | 4526 | 4519 | 1.087 | 0.089 | 0.026 | 0.037 |
| Use condom at last high-risk sex | 0.546 | 0.014 | 1522 | 1511 | 1.101 | 0.026 | 0.517 | 0.574 |
| Use condom at last high-risk sex - 15-24 | 0.541 | 0.019 | 872 | 879 | 1.135 | 0.035 | 0.503 | 0.579 |
| Had high-risk intercourse | 0.439 | 0.010 | 3465 | 3441 | 1.141 | 0.022 | 0.420 | 0.458 |
| Abstinence among youth (never had sex) | 0.456 | 0.014 | 1846 | 1867 | 1.221 | 0.031 | 0.428 | 0.484 |
| Sexually active past 12 months never married youth | 0.447 | 0.015 | 1846 | 1867 | 1.273 | 0.033 | 0.418 | 0.477 |
| Had injection past 12 months | 0.371 | 0.008 | 4987 | 4987 | 1.202 | 0.022 | 0.355 | 0.388 |
| Accepting attitudes to people with HIV | 0.427 | 0.010 | 4974 | 4975 | 1.403 | 0.023 | 0.408 | 0.447 |
| HIV test and result in past 12 months | 0.219 | 0.007 | 4987 | 4987 | 1.152 | 0.031 | 0.206 | 0.233 |
| Total fertility rate (past 3 years) | 3.850 | 0.111 | na | 13764 | 1.215 | 0.029 | 3.629 | 4.071 |
| Neonatal mortality (past 5 years) | 20.263 | 2.915 | 2676 | 2689 | 1.098 | 0.144 | 14.433 | 26.093 |
| Post-neonatal mortality (past 5 years) | 59.501 | 5.125 | 2703 | 2710 | 1.022 | 0.086 | 49.251 | 69.751 |
| Infant mortality (past 5 years) | 79.764 | 5.497 | 2721 | 2729 | 1.061 | 0.069 | 68.771 | 90.758 |
| Child mortality (past 5 years) | 36.841 | 4.035 | 2698 | 2707 | 1.087 | 0.110 | 28.772 | 44.910 |
| Under-five mortality (past 5 years) | 113.667 | 6.768 | 2761 | 2766 | 1.097 | 0.060 | 100.130 | 127.204 |
| HIV prevalence (15-49) | 0.311 | 0.009 | 4584 | 4424 | 1.288 | 0.028 | 0.294 | 0.329 |
| HIV prevalence for pregnant women (15-49) | 0.377 | 0.031 | 250 | 241 | 1.022 | 0.083 | 0.314 | 0.440 |
| HIV prevalence (15-24) | 0.227 | 0.011 | 2139 | 2074 | 1.223 | 0.049 | 0.205 | 0.249 |
| Continued... |  |  |  |  |  |  |  |  |


| Table B.2-Continued |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.284 | 0.011 | 4156 | 4156 | 1.616 | 0.040 | 0.262 | 0.307 |
| Literate | 0.896 | 0.006 | 4156 | 4156 | 1.288 | 0.007 | 0.884 | 0.909 |
| No education | 0.076 | 0.005 | 4156 | 4156 | 1.236 | 0.067 | 0.066 | 0.086 |
| Secondary education or higher | 0.575 | 0.012 | 4156 | 4156 | 1.503 | 0.020 | 0.552 | 0.598 |
| Never married | 0.658 | 0.010 | 4156 | 4156 | 1.295 | 0.014 | 0.639 | 0.677 |
| Currently married/in union | 0.293 | 0.009 | 4156 | 4156 | 1.287 | 0.031 | 0.275 | 0.311 |
| Married before age 20 | 0.056 | 0.005 | 2899 | 2833 | 1.124 | 0.086 | 0.046 | 0.065 |
| Had sexual intercourse before 18 | 0.314 | 0.010 | 2899 | 2833 | 1.171 | 0.032 | 0.293 | 0.334 |
| Children ever born | 3.983 | 0.088 | 1281 | 1219 | 1.049 | 0.022 | 3.807 | 4.160 |
| Ever used any contraceptive method | 0.869 | 0.012 | 1281 | 1219 | 1.224 | 0.013 | 0.846 | 0.892 |
| Knows any contraceptive method | 1.000 | 0.000 | 1281 | 1219 | na | 0.000 | 1.000 | 1.000 |
| Want no more children | 0.505 | 0.016 | 1281 | 1219 | 1.136 | 0.031 | 0.473 | 0.537 |
| Want to delay birth at least 2 years | 0.265 | 0.015 | 1281 | 1219 | 1.185 | 0.055 | 0.236 | 0.294 |
| Ideal family size | 3.162 | 0.037 | 4125 | 4127 | 1.206 | 0.012 | 3.088 | 3.236 |
| Use condom at last high-risk sex | 0.680 | 0.015 | 1433 | 1442 | 1.195 | 0.022 | 0.651 | 0.710 |
| Condom use last higher-risk intercourse (youth) | 0.704 | 0.021 | 678 | 694 | 1.181 | 0.029 | 0.663 | 0.746 |
| Abstinence among youth (never had intercourse) | 0.576 | 0.012 | 2057 | 2128 | 1.137 | 0.021 | 0.551 | 0.601 |
| Sexually active past 12 months (never-married youth) | 0.318 | 0.013 | 2057 | 2128 | 1.245 | 0.040 | 0.293 | 0.344 |
| Had injection past 12 months | 0.227 | 0.008 | 4156 | 4156 | 1.275 | 0.037 | 0.210 | 0.243 |
| Accepting attitudes to people with HIV | 0.466 | 0.010 | 4129 | 4128 | 1.260 | 0.021 | 0.446 | 0.485 |
| HIV test and result in past 12 months | 0.089 | 0.006 | 4156 | 4156 | 1.246 | 0.062 | 0.078 | 0.100 |
| Multi partners in past 12 months | 0.229 | 0.010 | 2528 | 2474 | 1.247 | 0.045 | 0.208 | 0.250 |
| Paid for sex past 12 months | 0.001 | 0.000 | 4156 | 4156 | 0.965 | 0.475 | 0.000 | 0.002 |
| HIV prevalence (15-49) | $0.197$ | $0.009$ | 3602 | 3763 | 1.321 | $0.044$ | $0.179$ | 0.214 |
| HIV prevalence (15-24) | 0.059 | 0.006 | 1918 | 2051 | 1.163 | 0.107 | 0.046 | 0.071 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| HIV prevalence (15-49) | 0.259 | 0.007 | 8186 | 8187 | 1.497 | 0.028 | $0.244$ | $0.273$ |
| HIV prevalence (15-24) | 0.143 | 0.007 | 4057 | 4124 | 1.265 | 0.049 | 0.129 | 0.157 |


| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $R+2 S E$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 1.000 | 0.000 | 1544 | 1330 | na | 0.000 | 1.000 | 1.000 |
| Literate | 0.940 | 0.007 | 1544 | 1330 | 1.147 | 0.007 | 0.926 | 0.954 |
| No education | 0.051 | 0.006 | 1544 | 1330 | 1.055 | 0.116 | 0.039 | 0.062 |
| Secondary education or higher | 0.735 | 0.017 | 1544 | 1330 | 1.529 | 0.023 | 0.700 | $0.769$ |
| Net attendance ratio for primary school | 0.860 | 0.020 | 787 | 680 | 1.439 | 0.023 | 0.820 | 0.901 |
| Never married | 0.499 | 0.014 | 1544 | 1330 | 1.133 | 0.029 | 0.470 | 0.528 |
| Currently married/in union | 0.407 | 0.013 | 1544 | 1330 | 1.077 | 0.033 | 0.380 | 0.434 |
| Married before age 20 | 0.142 | 0.013 | 1252 | 1081 | 1.267 | 0.088 | 0.117 | 0.167 |
| Had sexual intercourse before age 18 | 0.406 | 0.016 | 1252 | 1081 | 1.166 | 0.040 | 0.374 | 0.438 |
| Currently pregnant | 0.056 | 0.008 | 1544 | 1330 | 1.429 | 0.150 | 0.039 | 0.073 |
| Children ever born | 1.877 | 0.061 | 1544 | 1330 | 1.251 | 0.033 | 1.754 | 1.999 |
| Children surviving | 1.701 | 0.055 | 1544 | 1330 | 1.214 | 0.032 | 1.592 | 1.810 |
| Children ever born to women age 40-49 | 4.007 | 0.168 | 241 | 200 | 1.103 | 0.042 | 3.672 | 4.342 |
| Knows any contraceptive method | 0.999 | 0.001 | 616 | 542 | 0.731 | 0.001 | 0.997 | 1.000 |
| Ever using contraceptive method | 0.921 | 0.012 | 616 | 542 | 1.073 | 0.013 | 0.897 | 0.944 |
| Currently using any contraceptive method | 0.581 | 0.023 | 616 | 542 | 1.169 | 0.040 | 0.535 | 0.628 |
| Currently using pill | 0.106 | 0.015 | 616 | 542 | 1.179 | 0.138 | 0.077 | 0.135 |
| Currently using lUD | 0.019 | 0.005 | 616 | 542 | 0.982 | 0.281 | 0.008 | 0.030 |
| Currently using female sterilization | 0.082 | 0.012 | 616 | 542 | 1.083 | 0.146 | 0.058 | 0.106 |
| Currently using rhythm method | 0.007 | 0.004 | 616 | 542 | 1.157 | 0.566 | 0.000 | 0.014 |
| Obtained method from public-sector source | 0.270 | 0.023 | 682 | 576 | 1.377 | 0.087 | 0.223 | 0.317 |
| Want no more children | 0.678 | 0.023 | 616 | 542 | 1.208 | 0.034 | 0.632 | 0.723 |
| Want to delay birth at least 2 years | 0.155 | 0.013 | 616 | 542 | 0.920 | 0.086 | 0.128 | 0.182 |
| Ideal family size | 2.284 | 0.047 | 1533 | 1320 | 1.442 | 0.021 | 2.189 | 2.378 |
| Perinatal mortality (0-4 years) | 30.430 | 6.680 | 734 | 636 | 1.065 | 0.220 | 17.069 | 43.790 |
| Mothers received tetanus injection for last birth | 0.730 | 0.024 | 584 | 496 | 1.275 | 0.032 | 0.683 | 0.777 |
| Mothers received medical assistance at delivery | 0.881 | 0.016 | 724 | 630 | 1.246 | 0.019 | 0.848 | 0.914 |
| Had diarrhoea in two weeks before survey | 0.093 | 0.015 | 638 | 557 | 1.231 | 0.160 | 0.063 | 0.122 |
| Treated with oral rehydration salts (ORS) | 0.785 | 0.062 | 69 | 52 | 1.150 | 0.079 | 0.660 | 0.909 |
| Taken to a health provider | 0.667 | 0.072 | 69 | 52 | 1.119 | 0.108 | 0.524 | 0.811 |
| Vaccination card seen | 0.753 | 0.039 | 132 | 103 | 0.983 | 0.052 | 0.674 | 0.831 |
| Received BCG | 0.966 | 0.016 | 132 | 103 | 0.970 | 0.017 | 0.934 | 0.998 |
| Received DPT (3 doses) | 0.908 | 0.026 | 132 | 103 | 0.967 | 0.028 | 0.856 | 0.959 |
| Received polio (3 doses) | 0.793 | 0.036 | 132 | 103 | 0.968 | 0.046 | 0.721 | 0.865 |
| Received measles | 0.948 | 0.019 | 132 | 103 | 0.962 | 0.021 | 0.909 | 0.987 |
| Fully immunized | 0.777 | 0.037 | 132 | 103 | 0.977 | 0.048 | 0.702 | 0.852 |
| Height-for-age (below -2SD) | 0.231 | 0.021 | 537 | 483 | 1.121 | 0.093 | 0.188 | 0.274 |
| Weight-for-height (below-2SD) | 0.032 | 0.008 | 537 | 483 | 0.996 | 0.240 | 0.017 | 0.047 |
| Weight-for-age (below-2SD) | 0.045 | 0.010 | 537 | 483 | 1.127 | 0.225 | 0.025 | 0.065 |
| Anaemia in children | 0.500 | 0.038 | 442 | 396 | 1.547 | 0.077 | 0.423 | 0.577 |
| Anaemia in women | 0.358 | 0.015 | 1327 | 1131 | 1.097 | 0.041 | 0.329 | 0.387 |
| $\mathrm{BMI}<18.5$ | 0.030 | 0.005 | 1392 | 1183 | 1.077 | 0.164 | 0.020 | 0.040 |
| Use condom at last high-risk sex | 0.642 | 0.025 | 549 | 465 | 1.220 | 0.039 | 0.592 | 0.692 |
| Use condom at last high-risk sex-15-24 | 0.644 | 0.042 | 257 | 219 | 1.392 | 0.065 | 0.561 | 0.728 |
| Had high-risk intercourse | 0.486 | 0.018 | 1119 | 957 | 1.230 | 0.038 | 0.449 | 0.522 |
| Abstinence among youth (never had sex) | 0.409 | 0.020 | 492 | 420 | 0.890 | 0.048 | 0.369 | 0.448 |
| Sexually active past 12 months never married youth | 0.485 | 0.024 | 492 | 420 | 1.057 | 0.049 | 0.438 | 0.533 |
| Had injection past 12 months | 0.381 | 0.015 | 1544 | 1330 | 1.244 | 0.040 | 0.350 | 0.412 |
| Accepting attitudes to people with HIV | 0.483 | 0.018 | 1543 | 1330 | 1.390 | 0.037 | 0.448 | 0.518 |
| HIV test and result in past 12 months | 0.241 | 0.010 | 1544 | 1330 | 0.960 | 0.043 | 0.220 | 0.262 |
| Total fertility rate (past 3 years) | 3.015 | 0.164 | na | 3807 | 1.239 | 0.055 | 2.687 | 3.344 |
| Neonatal mortality (past 10 years) | 21.291 | 6.781 | 1459 | 1257 | 1.285 | 0.318 | 7.729 37.749 | 34.853 |
| Post-neonatal mortality (past 10 years) | 52.778 | 7.514 | 1460 | 1258 | 1.154 | 0.142 | 37.749 | 67.807 |
| Infant mortality (past 10 years) | 74.069 | 9.637 | 1460 | 1258 | 1.183 | 0.130 | 54.794 | 93.344 |
| Child mortality (past 10 years) | 35.968 | 5.916 | 1461 | 1257 | 1.134 | 0.164 | 24.136 | 47.801 |
| Under-five mortality (past 10 years) | 107.373 | 9.603 | 1462 | 1258 | 1.024 | 0.089 | 88.167 | 126.580 |
| HIV prevalence (15-49) | 0.368 | 0.019 | 1321 | 1171 | 1.466 | 0.053 | 0.329 | 0.407 |
| HIV prevalence for pregnant women (15-49) | 0.511 | 0.067 | 66 545 | 62 486 | 1.080 | 0.131 | 0.377 | 0.645 |
| HIV prevalence (15-24) | 0.270 | 0.023 | 545 | 486 | 1.217 | 0.086 | ${ }^{0.224}$ | $0.316$ <br> tinued... |


| Table B.3-Continued |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 1.000 | 0.000 | 1441 | 1181 | na | 0.000 | 1.000 | 1.000 |
| Literate | 0.932 | 0.010 | 1441 | 1181 | 1.570 | 0.011 | 0.911 | 0.953 |
| No education | 0.062 | 0.011 | 1441 | 1181 | 1.669 | 0.170 | 0.041 | 0.084 |
| Secondary education or higher | 0.725 | 0.020 | 1441 | 1181 | 1.668 | 0.027 | 0.686 | 0.764 |
| Never married | 0.540 | 0.016 | 1441 | 1181 | 1.255 | 0.030 | 0.507 | 0.573 |
| Currently married/in union | 0.415 | 0.015 | 1441 | 1181 | 1.172 | 0.037 | 0.384 | 0.445 |
| Married before age 20 | 0.037 | 0.007 | 1212 | 975 | 1.208 | 0.176 | 0.024 | 0.050 |
| Had sexual intercourse before 18 | 0.313 | 0.015 | 1212 | 975 | 1.134 | 0.048 | 0.282 | 0.343 |
| Children ever born | 3.545 | 0.143 | 622 | 490 | 1.273 | 0.040 | 3.259 | 3.831 |
| Ever used any contraceptive method | 0.919 | 0.012 | 622 | 490 | 1.105 | 0.013 | 0.895 | 0.943 |
| Knows any contraceptive method | 1.000 | 0.000 | 622 | 490 | na | 0.000 | 1.000 | 1.000 |
| Want no more children | 0.547 | 0.025 | 622 | 490 | 1.245 | 0.046 | 0.497 | 0.596 |
| Want to delay birth at least 2 years | 0.283 | 0.020 | 622 | 490 | 1.127 | 0.072 | 0.243 | 0.324 |
| Ideal family size | 2.898 | 0.051 | 1430 | 1173 | 1.132 | 0.018 | 2.796 | 2.999 |
| Use condom at last high-risk sex | 0.742 | 0.022 | 553 | 463 | 1.177 | 0.030 | 0.698 | 0.786 |
| Condom use last higher-risk intercourse (youth) | 0.800 | 0.032 | 214 | 181 | 1.154 | 0.040 | 0.736 | 0.863 |
| Abstinence among youth (never had intercourse) | 0.471 | 0.029 | 494 | 425 | 1.301 | 0.062 | 0.412 | 0.529 |
| Sexually active past 12 months (never-married youth) | 0.416 | 0.029 | 494 | 425 | 1.302 | 0.069 | 0.359 | 0.474 |
| Had injection past 12 months | 0.246 | 0.016 | 1441 | 1181 | 1.383 | 0.064 | 0.214 | 0.277 |
| Accepting attitudes to people with HIV | 0.468 | 0.015 | 1436 | 1177 | 1.162 | 0.033 | 0.437 | 0.499 |
| HIV test and result in past 12 months | 0.128 | 0.012 | 1441 | 1181 | 1.329 | 0.092 | 0.104 | 0.151 |
| Multi partners in past 12 months | 0.214 | 0.019 | 1079 | 873 | 1.493 | 0.087 | 0.176 | 0.251 |
| Paid for sex past 12 months | 0.002 | 0.001 | 1441 | 1181 | 0.907 | 0.605 | 0.000 | 0.003 |
| HIV prevalence (15-49) | 0.256 | 0.018 | 1155 | 1070 | 1.364 | 0.069 | 0.220 | 0.291 |
| HIV prevalence (15-24) | 0.072 | 0.014 | 425 | 412 | 1.152 | 0.201 | 0.043 | 0.101 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| HIV prevalence (15-49) | $0.314$ | 0.015 | 2476 | 2242 | 1.607 | 0.048 | 0.284 | 0.344 |
| HIV prevalence (15-24) | 0.179 | 0.016 | 970 | 899 | 1.265 | 0.087 | 0.148 | 0.210 |


| Variable | Value <br> (R) | Stand- <br> ard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.000 | 0.000 | 3443 | 3657 | na | na | 0.000 | 0.000 |
| Literate | 0.903 | 0.006 | 3443 | 3657 | 1.197 | 0.007 | 0.891 | 0.915 |
| No education | 0.092 | 0.005 | 3443 | 3657 | 1.116 | 0.060 | 0.081 | $0.103$ |
| Secondary education or higher | 0.541 | 0.012 | 3443 | 3657 | 1.442 | 0.023 | 0.517 | 0.566 |
| Net attendance ratio for primary school | 0.839 | 0.010 | 3535 | 3844 | 1.294 | 0.011 | 0.820 | 0.858 |
| Never married | 0.499 | 0.009 | 3443 | 3657 | 1.033 | 0.018 | 0.481 | 0.516 |
| Currently married/in union | 0.416 | 0.009 | 3443 | 3657 | 1.102 | 0.022 | 0.397 | 0.434 |
| Married before age 20 | 0.259 | 0.010 | 2470 | 2632 | 1.188 | 0.040 | 0.238 | 0.280 |
| Had sexual intercourse before age 18 | 0.525 | 0.012 | 2470 | 2632 | 1.187 | 0.023 | 0.501 | 0.549 |
| Currently pregnant | 0.056 | 0.004 | 3443 | 3657 | 1.020 | 0.071 | 0.048 | 0.064 |
| Children ever born | 2.430 | 0.047 | 3443 | 3657 | 1.048 | 0.019 | 2.336 | 2.524 |
| Children surviving | 2.184 | 0.042 | 3443 | 3657 | 1.034 | 0.019 | 2.099 | 2.268 |
| Children ever born to women age 40-49 | 5.769 | 0.145 | 584 | 620 | 1.213 | 0.025 | 5.480 | 6.059 |
| Knows any contraceptive method | 0.999 | 0.001 | 1453 | 1520 | 0.880 | 0.001 | 0.998 | 1.000 |
| Ever using contraceptive method | 0.882 | 0.010 | 1453 | 1520 | 1.206 | 0.012 | 0.861 | 0.902 |
| Currently using any contraceptive method | 0.480 | 0.014 | 1453 | 1520 | 1.045 | 0.029 | 0.452 | 0.507 |
| Currently using pill | 0.096 | 0.008 | 1453 | 1520 | 0.985 | 0.079 | 0.081 | 0.111 |
| Currently using IUD | 0.012 | 0.003 | 1453 | 1520 | 0.985 | 0.233 | 0.006 | 0.018 |
| Currently using female sterilization | 0.049 | 0.007 | 1453 | 1520 | 1.185 | 0.137 | 0.035 | 0.062 |
| Currently using rhythm method | 0.001 | 0.001 | 1453 | 1520 | 0.958 | 0.707 | 0.000 | 0.003 |
| Obtained method from public-sector source | 0.532 | 0.019 | 1123 | 1195 | 1.277 | 0.036 | 0.494 | 0.570 |
| Want no more children | 0.684 | 0.015 | 1453 | 1520 | 1.196 | 0.021 | 0.654 | 0.713 |
| Want to delay birth at least 2 years | 0.150 | 0.010 | 1453 | 1520 | 1.050 | 0.066 | 0.130 | 0.169 |
| Ideal family size | 2.608 | 0.034 | 3419 | 3630 | 1.285 | 0.013 | 2.540 | 2.676 |
| Perinatal mortality (0-4 years) | 29.071 | 3.744 | 2118 | 2229 | 0.953 | 0.129 | 21.584 | 36.559 |
| Mothers received tetanus injection for last birth | 0.660 | 0.014 | 1552 | 1638 | 1.133 | 0.021 | 0.632 | 0.687 |
| Mothers received medical assistance at delivery | 0.703 | 0.013 | 2088 | 2199 | 1.153 | 0.019 | 0.677 | 0.730 |
| Had diarrhoea in two weeks before survey | 0.146 | 0.010 | 1899 | 1996 | 1.175 | 0.068 | 0.126 | 0.166 |
| Treated with oral rehydration salts (ORS) | 0.867 | 0.021 | 278 | 292 | 1.011 | 0.025 | 0.825 | 0.910 |
| Taken to a health provider | 0.729 | 0.037 | 278 | 292 | 1.329 | 0.051 | 0.654 | 0.803 |
| Vaccination card seen | 0.862 | 0.017 | 406 | 428 | 0.989 | 0.020 | 0.828 | 0.897 |
| Received BCG | 0.973 | 0.009 | 406 | 428 | 1.120 | 0.009 | 0.955 | 0.991 |
| Received DPT (3 doses) | 0.919 | 0.013 | 406 | 428 | 0.975 | 0.014 | 0.893 | 0.946 |
| Received polio (3 doses) | 0.892 | 0.016 | 406 | 428 | 0.985 | 0.017 | 0.861 | 0.923 |
| Received measles | 0.907 | 0.016 | 406 | 428 | 1.139 | 0.018 | 0.874 | 0.940 |
| Fully immunized | 0.827 | 0.020 | 406 | 428 | 1.053 | 0.024 | 0.787 | 0.867 |
| Height-for-age (below -2SD) | 0.300 | 0.011 | 2234 | 2457 | 1.094 | 0.038 | 0.278 | 0.323 |
| Weight-for-height (below -2SD) | 0.023 | 0.003 | 2234 | 2457 | 0.979 | 0.139 | 0.017 | 0.030 |
| Weight-for-age (below -2SD) | 0.056 | 0.004 | 2234 | 2457 | 0.862 | 0.076 | 0.048 | 0.065 |
| Anaemia in children | 0.404 | 0.013 | 2079 | 2285 | 1.238 | 0.033 | 0.377 | 0.431 |
| Anaemia in women | 0.286 | 0.009 | 3268 | 3467 | 1.099 | 0.030 | 0.269 | 0.304 |
| BMI < 18.5 | 0.032 | 0.003 | 3134 | 3336 | 1.082 | 0.106 | 0.025 | 0.039 |
| Use condom at last high-risk sex | 0.503 | 0.017 | 973 | 1046 | 1.030 | 0.033 | 0.470 | 0.536 |
| Use condom at last high-risk sex-15-24 | 0.507 | 0.021 | 615 | 660 | 1.053 | 0.042 | 0.464 | 0.549 |
| Had high-risk intercourse | 0.421 | 0.011 | 2346 | 2484 | 1.108 | 0.027 | 0.398 | 0.444 |
| Abstinence among youth (never had sex) | 0.470 | 0.017 | 1354 | 1447 | 1.259 | 0.036 | 0.435 | 0.504 |
| Sexually active past 12 months never married youth | 0.436 | 0.018 | 1354 | 1447 | 1.303 | 0.040 | 0.401 | 0.472 |
| Had injection past 12 months | 0.368 | 0.010 | 3443 | 3657 | 1.181 | 0.026 | 0.349 | 0.387 |
| Accepting attitudes to people with HIV | 0.407 | 0.012 | 3431 | 3645 | 1.398 | 0.029 | 0.384 | 0.430 |
| HIV test and result in past 12 months | 0.211 | 0.008 | 3443 | 3657 | 1.204 | 0.040 | 0.194 | 0.228 |
| Total fertility rate (past 3 years) | 4.213 | 0.136 | na | 9957 | 1.195 | 0.032 | 3.941 | 4.484 |
| Neonatal mortality (past 10 years) | 23.586 | 2.945 | 3899 | 4112 | 1.092 | 0.125 | 17.695 | 29.476 |
| Post-neonatal mortality (past 10 years) | 53.959 | 3.981 | 3900 | 4113 | 0.995 | 0.074 | 45.998 | 61.921 |
| Infant mortality (past 10 years) | 77.545 | 5.003 | 3901 | 4114 | 1.052 | 0.065 | 67.538 | 87.552 |
| Child mortality (past 10 years) | 29.754 | 3.270 | 3912 | 4126 | 1.017 | 0.110 | 23.213 | 36.295 |
| Under-five mortality (past 10 years) | 104.992 | 6.165 | 3915 | 4129 | 1.089 | 0.059 | 92.662 | 117.322 |
| HIV prevalence (15-49) | 0.291 | 0.010 | 3263 | 3252 | 1.204 | 0.033 | 0.272 | 0.310 |
| HIV prevalence for pregnant women (15-49) | 0.330 | 0.035 | 184 | 178 | 0.995 | 0.105 | 0.261 | 0.399 |
| HIV prevalence (15-24) | 0.213 | 0.012 | 1594 | 1587 | 1.212 | 0.058 | $0.189$ | $\begin{array}{r} 0.238 \\ \text { tinued... } \end{array}$ |


| Table B.4-Continued |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.000 | 0.000 | 2715 | 2975 | na | na | 0.000 | 0.000 |
| Literate | 0.883 | 0.007 | 2715 | 2975 | 1.199 | 0.008 | 0.868 | 0.897 |
| No education | 0.082 | 0.006 | 2715 | 2975 | 1.089 | 0.070 | 0.070 | 0.093 |
| Secondary education or higher | 0.515 | 0.014 | 2715 | 2975 | 1.477 | 0.027 | 0.487 | 0.544 |
| Never married | 0.704 | 0.011 | 2715 | 2975 | 1.259 | 0.016 | 0.682 | 0.726 |
| Currently married/in union | 0.245 | 0.011 | 2715 | 2975 | 1.283 | 0.043 | 0.224 | 0.266 |
| Married before age 20 | 0.066 | 0.006 | 1687 | 1859 | 1.070 | 0.098 | 0.053 | 0.079 |
| Had sexual intercourse before 18 | 0.314 | 0.013 | 1687 | 1859 | 1.166 | 0.042 | 0.288 | 0.340 |
| Children ever born | 4.278 | 0.111 | 659 | 729 | 0.915 | 0.026 | 4.056 | 4.501 |
| Ever used any contraceptive method | 0.835 | 0.017 | 659 | 729 | 1.186 | 0.021 | 0.801 | 0.869 |
| Knows any contraceptive method | 1.000 | 0.000 | 659 | 729 | na | 0.000 | 1.000 | 1.000 |
| Want no more children | 0.477 | 0.020 | 659 | 729 | 1.044 | 0.043 | 0.437 | 0.518 |
| Want to delay birth at least 2 years | 0.252 | 0.020 | 659 | 729 | 1.187 | 0.080 | 0.212 | 0.293 |
| Ideal family size | 3.267 | 0.047 | 2695 | 2954 | 1.185 | 0.014 | 3.173 | 3.362 |
| Use condom at last high-risk sex | 0.651 | 0.019 | 880 | 978 | 1.178 | 0.029 | 0.613 | 0.689 |
| Condom use last higher-risk intercourse (youth) | 0.671 | 0.025 | 464 | 513 | 1.155 | 0.038 | 0.621 | 0.721 |
| Abstinence among youth (never had intercourse) | 0.603 | 0.014 | 1563 | 1703 | 1.098 | 0.023 | 0.575 | 0.630 |
| Sexually active past 12 months (never-married youth) | 0.294 | 0.014 | 1563 | 1703 | 1.237 | 0.049 | 0.265 | 0.322 |
| Had injection past 12 months | 0.219 | 0.010 | 2715 | 2975 | 1.222 | 0.044 | 0.199 | 0.238 |
| Accepting attitudes to people with HIV | 0.465 | 0.012 | 2693 | 2951 | 1.275 | 0.026 | 0.440 | 0.489 |
| HIV test and result in past 12 months | 0.074 | 0.006 | 2715 | 2975 | 1.202 | 0.082 | 0.062 | 0.086 |
| Multi partners in past 12 months | 0.238 | 0.012 | 1449 | 1601 | 1.109 | 0.052 | 0.213 | 0.263 |
| Paid for sex past 12 months | 0.001 | 0.001 | 2715 | 2975 | 1.021 | 0.706 | 0.000 | 0.002 |
| HIV prevalence (15-49) HIV prevalence (15-24) | 0.174 0.055 | 0.010 0.007 | 2447 1493 | 2693 | 1.275 1.169 | 0.056 0.125 | 0.154 0.041 | 0.193 0.069 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| MEN HIV prevalence (15-49) | 0.238 | 0.008 | 5710 | 5945 | 1.407 | 0.033 | 0.222 | 0.254 |
| HIV prevalence (15-24) | 0.133 | 0.008 | 3087 | 3226 | 1.256 | 0.058 | 0.118 | 0.148 |


| Variable | Value <br> (R) | Stand- <br> ard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.305 | 0.024 | 1263 | 1340 | 1.813 | 0.077 | 0.258 | 0.352 |
| Literate | 0.926 | 0.010 | 1263 | 1340 | 1.375 | 0.011 | 0.906 | 0.946 |
| No education | 0.081 | 0.008 | 1263 | 1340 | 1.103 | 0.104 | 0.064 | 0.098 |
| Secondary education or higher | 0.628 | 0.020 | 1263 | 1340 | 1.498 | 0.032 | 0.587 | 0.669 |
| Net attendance ratio for primary school | 0.854 | 0.014 | 1035 | 1108 | 1.143 | 0.016 | 0.826 | 0.882 |
| Never married | 0.459 | 0.014 | 1263 | 1340 | 1.017 | 0.031 | 0.430 | 0.487 |
| Currently married/in union | 0.448 | 0.016 | 1263 | 1340 | 1.138 | 0.036 | 0.416 | 0.480 |
| Married before age 20 | 0.248 | 0.016 | 975 | 1037 | 1.162 | 0.065 | 0.216 | 0.280 |
| Had sexual intercourse before age 18 | 0.474 | 0.022 | 975 | 1037 | 1.379 | 0.047 | 0.429 | 0.518 |
| Currently pregnant | 0.051 | 0.006 | 1263 | 1340 | 0.991 | 0.120 | 0.039 | 0.063 |
| Children ever born | 2.284 | 0.064 | 1263 | 1340 | 0.928 | 0.028 | 2.156 | 2.413 |
| Children surviving | 2.067 | 0.055 | 1263 | 1340 | 0.874 | 0.027 | 1.957 | 2.178 |
| Children ever born to women age 40-49 | 5.198 | 0.209 | 215 | 225 | 1.044 | 0.040 | 4.780 | 5.615 |
| Knows any contraceptive method | 0.999 | 0.001 | 570 | 600 | 0.877 | 0.001 | 0.996 | 1.000 |
| Ever using contraceptive method | 0.874 | 0.014 | 570 | 600 | 1.004 | 0.016 | 0.846 | 0.902 |
| Currently using any contraceptive method | 0.537 | 0.019 | 570 | 600 | 0.906 | 0.035 | 0.499 | 0.575 |
| Currently using pill | 0.109 | 0.013 | 570 | 600 | 1.018 | 0.122 | 0.082 | 0.136 |
| Currently using lUD | 0.014 | 0.005 | 570 | 600 | 1.080 | 0.385 | 0.003 | 0.024 |
| Currently using female sterilization | 0.052 | 0.009 | 570 | 600 | 0.956 | 0.170 | 0.035 | 0.070 |
| Currently using rhythm method | 0.002 | 0.002 | 570 | 600 | 0.932 | 0.998 | 0.000 | 0.005 |
| Obtained method from public-sector source | 0.496 | 0.029 | 468 | 497 | 1.233 | 0.058 | 0.439 | 0.553 |
| Want no more children | 0.655 | 0.023 | 570 | 600 | 1.131 | 0.034 | 0.610 | 0.700 |
| Want to delay birth at least 2 years | 0.143 | 0.014 | 570 | 600 | 0.983 | 0.101 | 0.114 | 0.172 |
| Ideal family size | 2.517 | 0.061 | 1252 | 1327 | 1.387 | 0.024 | 2.395 | 2.639 |
| Perinatal mortality (0-4 years) | 25.272 | 6.907 | 718 | 770 | 1.196 | 0.273 | 11.457 | 39.086 |
| Mothers received tetanus injection for last birth | 0.642 | 0.020 | 538 | 572 | 0.971 | 0.031 | 0.602 | 0.682 |
| Mothers received medical assistance at delivery | 0.783 | 0.021 | 714 | 766 | 1.141 | 0.026 | 0.741 | 0.824 |
| Had diarrhoea in two weeks before survey | 0.110 | 0.015 | 653 | 694 | 1.175 | 0.135 | 0.081 | 0.140 |
| Treated with oral rehydration salts (ORS) | 0.865 | 0.038 | 65 | 77 | 0.947 | 0.044 | 0.788 | 0.942 |
| Taken to a health provider | 0.668 | 0.097 | 65 | 77 | 1.713 | 0.145 | 0.474 | 0.863 |
| Vaccination card seen | 0.868 | 0.033 | 141 | 149 | 1.101 | 0.038 | 0.802 | 0.934 |
| Received BCG | 0.972 | 0.013 | 141 | 149 | 0.962 | 0.014 | 0.946 | 0.999 |
| Received DPT (3 doses) | 0.931 | 0.021 | 141 | 149 | 0.960 | 0.022 | 0.890 | 0.972 |
| Received polio (3 doses) | 0.893 | 0.027 | 141 | 149 | 0.967 | 0.030 | 0.839 | 0.946 |
| Received measles | 0.937 | 0.022 | 141 | 149 | 1.048 | 0.023 | 0.893 | 0.980 |
| Fully immunized | 0.843 | 0.032 | 141 | 149 | 0.991 | 0.037 | 0.780 | 0.906 |
| Height-for-age (below -2SD) | 0.316 | 0.021 | 689 | 755 | 1.123 | 0.067 | 0.273 | 0.359 |
| Weight-for-height (below-2SD) | 0.031 | 0.007 | 689 | 755 | 1.058 | 0.227 | 0.017 | 0.045 |
| Weight-for-age (below -2SD) | 0.067 | 0.009 | 689 | 755 | 0.895 | 0.128 | 0.049 | 0.084 |
| Anaemia in children | 0.428 | 0.017 | 632 | 697 | 0.902 | 0.041 | 0.393 | 0.463 |
| Anaemia in women | 0.285 | 0.015 | 1150 | 1226 | 1.156 | 0.054 | 0.255 | 0.316 |
| $\mathrm{BMI}<18.5$ | 0.020 | 0.005 | 1137 | 1209 | 1.168 | 0.244 | 0.010 | 0.029 |
| Use condom at last high-risk sex | 0.564 | 0.034 | 340 | 366 | 1.257 | 0.060 | 0.496 | 0.632 |
| Use condom at last high-risk sex-15-24 | 0.589 | 0.050 | 181 | 198 | 1.374 | 0.086 | 0.488 | 0.690 |
| Had high-risk intercourse | 0.394 | 0.017 | 874 | 929 | 1.023 | 0.043 | 0.360 | 0.427 |
| Abstinence among youth (never had sex) | 0.493 | 0.032 | 408 | 436 | 1.286 | 0.065 | 0.429 | 0.557 |
| Sexually active past 12 months never married youth | 0.424 | 0.026 | 408 | 436 | 1.073 | 0.062 | 0.371 | 0.476 |
| Had injection past 12 months | 0.372 | 0.016 | 1263 | 1340 | 1.148 | 0.042 | 0.341 | 0.403 |
| Accepting attitudes to people with HIV | 0.453 | 0.018 | 1261 | 1339 | 1.273 | 0.039 | 0.417 | 0.488 |
| HIV test and result in past 12 months | 0.197 | 0.015 | 1263 | 1340 | 1.347 | 0.077 | 0.167 | 0.227 |
| Total fertility rate (past 3 years) | 3.618 | 0.210 | na | 3733 | 1.226 | 0.058 | 3.199 | 4.038 |
| Neonatal mortality (past 10 years) | 23.812 | 6.298 | 1371 | 1470 | 1.423 | 0.265 | 11.215 | 36.408 |
| Post-neonatal mortality (past 10 years) | 46.540 | 5.239 | 1371 | 1470 | 0.852 | 0.113 | 36.063 | 57.017 |
| Infant mortality (past 10 years) | 70.351 | 9.396 | 1371 | 1470 | 1.254 | 0.134 | 51.559 | 89.144 |
| Child mortality (past 10 years) | 27.046 | 5.882 | 1375 | 1475 | 1.076 | 0.217 | 15.282 | 38.811 |
| Under-five mortality (past 10 years) | 95.495 | 12.551 | 1375 | 1475 | 1.346 | 0.131 | 70.393 | 120.598 |
| HIV prevalence (15-49) | 0.337 | 0.016 | 1146 | 1192 | 1.160 | 0.048 | 0.305 | 0.370 |
| HIV prevalence for pregnant women (15-49) | 0.324 | 0.068 | 63 | 65 | 1.138 | 0.209 | 0.188 | 0.460 |
| HIV prevalence (15-24) | 0.278 | 0.025 | 499 | 516 | 1.237 | 0.089 | 0.228 | 0.328 |
| Continued... |  |  |  |  |  |  |  |  |


| Table B.5-Continued |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.348 | 0.024 | 1019 | 1099 | 1.582 | 0.068 | 0.301 | 0.395 |
| Literate | 0.916 | 0.011 | 1019 | 1099 | 1.313 | 0.012 | 0.893 | 0.939 |
| No education | 0.085 | 0.012 | 1019 | 1099 | 1.419 | 0.146 | 0.060 | 0.110 |
| Secondary education or higher | 0.623 | 0.019 | 1019 | 1099 | 1.273 | 0.031 | 0.584 | 0.662 |
| Never married | 0.590 | 0.021 | 1019 | 1099 | 1.341 | 0.035 | 0.548 | 0.631 |
| Currently married/in union | 0.354 | 0.021 | 1019 | 1099 | 1.377 | 0.058 | 0.312 | 0.395 |
| Married before age 20 | 0.052 | 0.012 | 744 | 804 | 1.471 | 0.231 | 0.028 | 0.076 |
| Had sexual intercourse before 18 | 0.316 | 0.020 | 744 | 804 | 1.164 | 0.063 | 0.277 | 0.356 |
| Children ever born | 4.090 | 0.107 | 362 | 389 | 0.695 | 0.026 | 3.876 | 4.304 |
| Ever used any contraceptive method | 0.871 | 0.023 | 362 | 389 | 1.329 | 0.027 | 0.824 | 0.918 |
| Knows any contraceptive method | 1.000 | 0.000 | 362 | 389 | na | 0.000 | 1.000 | 1.000 |
| Want no more children | 0.517 | 0.023 | 362 | 389 | 0.893 | 0.045 | 0.470 | 0.564 |
| Want to delay birth at least 2 years | 0.236 | 0.026 | 362 | 389 | 1.143 | 0.108 | 0.185 | 0.287 |
| Ideal family size | 3.087 | 0.066 | 1006 | 1086 | 1.032 | 0.021 | 2.956 | 3.219 |
| Use condom at last high-risk sex | 0.732 | 0.026 | 317 | 359 | 1.040 | 0.035 | 0.680 | 0.784 |
| Condom use last higher-risk intercourse (youth) | 0.821 | 0.036 | 134 | 151 | 1.090 | 0.044 | 0.748 | 0.893 |
| Abstinence among youth (never had intercourse) | 0.593 | 0.030 | 452 | 486 | 1.304 | 0.051 | 0.533 | 0.653 |
| Sexually active past 12 months (never-married youth) | 0.301 | 0.030 | 452 | 486 | 1.397 | 0.100 | 0.241 | 0.361 |
| Had injection past 12 months ( | 0.238 | 0.018 | 1019 | 1099 | 1.348 | 0.076 | 0.202 | 0.274 |
| Accepting attitudes to people with HIV | 0.502 | 0.016 | 1015 | 1096 | 1.022 | 0.032 | 0.470 | 0.534 |
| HIV test and result in past 12 months | 0.086 | 0.009 | 1019 | 1099 | 1.017 | 0.104 | 0.068 | 0.104 |
| Multi partners in past 12 months | 0.189 | 0.022 | 642 | 698 | 1.391 | 0.114 | 0.146 | 0.233 |
| Paid for sex past 12 months | 0.000 | 0.000 | 1019 | 1099 | na | na | 0.000 | 0.000 |
| HIV prevalence (15-49) | 0.231 | 0.018 | 880 | 1001 | 1.286 | 0.079 | 0.194 | 0.267 |
| HIV prevalence (15-24) | 0.055 | 0.013 | 426 | 483 | 1.163 | 0.233 | 0.030 | 0.081 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| HIV prevalence (15-49) | 0.289 | 0.014 | 2026 | 2193 | 1.432 | 0.050 | 0.260 | 0.318 |
| HIV prevalence (15-24) | 0.170 | 0.018 | 925 | 998 | 1.419 | 0.103 | 0.135 | 0.206 |

na $=$ Not applicable

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.392 | 0.027 | 1475 | 1647 | 2.106 | 0.068 | 0.339 | 0.446 |
| Literate | 0.935 | 0.006 | 1475 | 1647 | 0.988 | 0.007 | 0.922 | 0.947 |
| No education | 0.051 | 0.006 | 1475 | 1647 | 1.061 | 0.120 | 0.039 | 0.063 |
| Secondary education or higher | 0.649 | 0.019 | 1475 | 1647 | 1.542 | 0.030 | 0.610 | 0.687 |
| Net attendance ratio for primary school | 0.886 | 0.010 | 1192 | 1332 | 1.011 | 0.012 | 0.866 | 0.906 |
| Never married | 0.520 | 0.014 | 1475 | 1647 | 1.087 | 0.027 | 0.491 | 0.548 |
| Currently married/in union | 0.395 | 0.015 | 1475 | 1647 | 1.152 | 0.037 | 0.365 | 0.424 |
| Married before age 20 | 0.198 | 0.013 | 1102 | 1232 | 1.087 | 0.066 | 0.172 | 0.224 |
| Had sexual intercourse before age 18 | 0.456 | 0.015 | 1102 | 1232 | 1.010 | 0.033 | 0.425 | 0.486 |
| Currently pregnant | 0.057 | 0.007 | 1475 | 1647 | 1.205 | 0.127 | 0.043 | 0.072 |
| Children ever born | 2.140 | 0.073 | 1475 | 1647 | 1.178 | 0.034 | 1.994 | 2.286 |
| Children surviving | 1.938 | 0.065 | 1475 | 1647 | 1.152 | 0.034 | 1.807 | 2.068 |
| Children ever born to women age 40-49 | 5.126 | 0.222 | 228 | 259 | 1.203 | 0.043 | 4.681 | 5.570 |
| Knows any contraceptive method | 0.999 | 0.001 | 578 | 650 | 0.646 | 0.001 | 0.998 | 1.000 |
| Ever using contraceptive method | 0.914 | 0.012 | 578 | 650 | 1.039 | 0.013 | 0.890 | 0.939 |
| Currently using any contraceptive method | 0.525 | 0.021 | 578 | 650 | 1.024 | 0.041 | 0.482 | 0.568 |
| Currently using pill | 0.104 | 0.012 | 578 | 650 | 0.936 | 0.114 | 0.080 | 0.128 |
| Currently using IUD | 0.019 | 0.004 | 578 | 650 | 0.766 | 0.229 | 0.010 | 0.028 |
| Currently using female sterilization | 0.052 | 0.011 | 578 | 650 | 1.185 | 0.211 | 0.030 | 0.074 |
| Currently using rhythm method | 0.003 | 0.003 | 578 | 650 | 1.224 | 0.997 | 0.000 | 0.008 |
| Obtained method from public-sector source | 0.330 | 0.027 | 550 | 604 | 1.326 | 0.081 | 0.276 | 0.383 |
| Want no more children | 0.714 | 0.022 | 578 | 650 | 1.185 | 0.031 | 0.669 | 0.758 |
| Want to delay birth at least 2 years | 0.145 | 0.013 | 578 | 650 | 0.882 | 0.089 | 0.119 | 0.171 |
| Ideal family size | 2.381 | 0.042 | 1468 | 1639 | 1.147 | 0.018 | 2.297 | 2.465 |
| Perinatal mortality (0-4 years) | 28.976 | 5.984 | 775 | 879 | 1.010 | 0.207 | 17.009 | 40.943 |
| Mothers received tetanus injection for last birth | 0.726 | 0.024 | 591 | 668 | 1.304 | 0.033 | 0.679 | 0.774 |
| Mothers received medical assistance at delivery | 0.799 | 0.019 | 767 | 870 | 1.196 | 0.024 | 0.760 | 0.838 |
| Had diarrhoea in two weeks before survey | 0.123 | 0.015 | 690 | 784 | 1.143 | 0.120 | 0.093 | 0.152 |
| Treated with oral rehydration salts (ORS) | 0.828 | 0.048 | 84 | 96 | 1.102 | 0.058 | 0.732 | 0.923 |
| Taken to a health provider | 0.714 | 0.047 | 84 | 96 | 0.942 | 0.066 | 0.620 | 0.809 |
| Vaccination card seen | 0.845 | 0.027 | 144 | 162 | 0.895 | 0.032 | 0.791 | 0.899 |
| Received BCG | 0.966 | 0.018 | 144 | 162 | 1.179 | 0.018 | 0.931 | 1.000 |
| Received DPT (3 doses) | 0.933 | 0.026 | 144 | 162 | 1.263 | 0.028 | 0.881 | 0.986 |
| Received polio (3 doses) | 0.884 | 0.029 | 144 | 162 | 1.097 | 0.033 | 0.825 | 0.942 |
| Received measles | 0.905 | 0.034 | 144 | 162 | 1.411 | 0.038 | 0.837 | 0.974 |
| Fully immunized | 0.819 | 0.041 | 144 | 162 | 1.283 | 0.050 | 0.737 | 0.901 |
| Height-for-age (below -2SD) | 0.295 | 0.021 | 747 | 869 | 1.157 | 0.070 | 0.253 | 0.336 |
| Weight-for-height (below -2SD) | 0.023 | 0.005 | 747 | 869 | 0.904 | 0.230 | 0.012 | 0.033 |
| Weight-for-age (below-2SD) | 0.057 | 0.007 | 747 | 869 | 0.874 | 0.128 | 0.042 | 0.071 |
| Anaemia in children | 0.451 | 0.028 | 663 | 774 | 1.421 | 0.062 | 0.394 | 0.507 |
| Anaemia in women | 0.333 | 0.013 | 1347 | 1505 | 0.980 | 0.038 | 0.308 | 0.359 |
| $\mathrm{BMI}<18.5$ | 0.035 | 0.005 | 1344 | 1494 | 1.042 | 0.149 | 0.025 | 0.046 |
| Use condom at last high-risk sex | 0.606 | 0.021 | 463 | 515 | 0.936 | 0.035 | 0.564 | 0.649 |
| Use condom at last high-risk sex-15-24 | 0.569 | 0.031 | 258 | 288 | 0.999 | 0.054 | 0.507 | 0.631 |
| Had high-risk intercourse | 0.459 | 0.021 | 1008 | 1121 | 1.306 | 0.045 | 0.418 | 0.500 |
| Abstinence among youth (never had sex) | 0.444 | 0.023 | 564 | 632 | 1.099 | 0.052 | 0.398 | 0.490 |
| Sexually active past 12 months never married youth | 0.430 | 0.026 | 564 | 632 | 1.267 | 0.061 | 0.377 | 0.483 |
| Had injection past 12 months | 0.341 | 0.013 | 1475 | 1647 | 1.084 | 0.039 | 0.314 | 0.368 |
| Accepting attitudes to people with HIV | 0.447 | 0.020 | 1469 | 1642 | 1.544 | 0.045 | 0.407 | 0.487 |
| HIV test and result in past 12 months | 0.242 | 0.012 | 1475 | 1647 | 1.067 | 0.049 | 0.218 | 0.265 |
| Total fertility rate (past 3 years) | 3.673 | 0.176 | na | 4550 | 1.063 | 0.048 | 3.321 | 4.025 |
| Neonatal mortality (past 10 years) | 32.549 | 5.988 | 1473 | 1663 | 0.997 | 0.184 | 20.572 | 44.525 |
| Post-neonatal mortality (past 10 years) | 49.176 | 7.094 | 1474 | 1664 | 1.173 | 0.144 | 34.988 | 63.365 |
| Infant mortality (past 10 years) | 81.725 | 8.992 | 1474 | 1664 | 1.087 | 0.110 | 63.741 | 99.708 |
| Child mortality (past 10 years) | $\begin{array}{r}33.393 \\ \hline 112.389\end{array}$ | 5.871 | 1478 | 1669 | 1.177 | 0.176 | 21.651 | 45.135 |
| Under-five mortality (past 10 years) | 112.389 | 9.547 | 1479 | 1669 | 1.005 | 0.085 | 93.295 | 131.483 |
| HIV prevalence (15-49) | 0.304 | 0.019 | 1344 | 1459 | 1.489 | 0.061 | 0.267 | 0.342 |
| HIV prevalence for pregnant women (15-49) | $0.455$ | 0.061 | 66 | 74 | 0.987 | 0.134 | 0.333 | 0.577 |
| HIV prevalence (15-24) | 0.207 | 0.021 | 638 | 696 | 1.294 | 0.101 | $0.165$ | $0.248$ <br> ntinued... |


| Table B.6-Continued |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.356 | 0.024 | 1186 | 1349 | 1.760 | 0.069 | 0.307 | 0.405 |
| Literate | 0.907 | 0.012 | 1186 | 1349 | 1.399 | 0.013 | 0.883 | 0.931 |
| No education | 0.052 | 0.008 | 1186 | 1349 | 1.261 | 0.157 | 0.036 | 0.068 |
| Secondary education or higher | 0.636 | 0.022 | 1186 | 1349 | 1.560 | 0.034 | 0.593 | 0.680 |
| Never married | 0.691 | 0.017 | 1186 | 1349 | 1.287 | 0.025 | 0.656 | 0.725 |
| Currently married/in union | 0.273 | 0.015 | 1186 | 1349 | 1.189 | 0.056 | 0.242 | 0.303 |
| Married before age 20 | 0.042 | 0.007 | 823 | 930 | 0.997 | 0.166 | 0.028 | 0.056 |
| Had sexual intercourse before 18 | 0.312 | 0.017 | 823 | 930 | 1.041 | 0.054 | 0.279 | 0.346 |
| Children ever born | 3.581 | 0.189 | 323 | 368 | 1.132 | 0.053 | 3.204 | 3.959 |
| Ever used any contraceptive method | 0.910 | 0.017 | 323 | 368 | 1.042 | 0.018 | 0.877 | 0.944 |
| Knows any contraceptive method | 1.000 | 0.000 | 323 | 368 | na | 0.000 | 1.000 | 1.000 |
| Want no more children | 0.497 | 0.033 | 323 | 368 | 1.168 | 0.065 | 0.432 | 0.562 |
| Want to delay birth at least 2 years | 0.321 | 0.028 | 323 | 368 | 1.079 | 0.088 | 0.265 | 0.377 |
| Ideal family size | 2.995 | 0.061 | 1180 | 1342 | 1.353 | 0.020 | 2.873 | 3.117 |
| Use condom at last high-risk sex | 0.690 | 0.025 | 440 | 509 | 1.134 | 0.036 | 0.640 | 0.740 |
| Condom use last higher-risk intercourse (youth) | 0.736 | 0.034 | 215 | 252 | 1.115 | 0.046 | 0.669 | 0.804 |
| Abstinence among youth (never had intercourse) | 0.532 | 0.021 | 622 | 712 | 1.051 | 0.040 | 0.490 | 0.574 |
| Sexually active past 12 months (never-married youth) | 0.341 | 0.022 | 622 | 712 | 1.164 | 0.065 | 0.297 | 0.386 |
| Had injection past 12 months | 0.213 | 0.014 | 1186 | 1349 | 1.191 | 0.066 | 0.185 | 0.241 |
| Accepting attitudes to people with HIV | 0.467 | 0.017 | 1180 | 1341 | 1.202 | 0.037 | 0.432 | 0.502 |
| HIV test and result in past 12 months | 0.092 | 0.011 | 1186 | 1349 | 1.308 | 0.119 | 0.070 | 0.114 |
| Multi partners in past 12 months | 0.255 | 0.021 | 703 | 804 | 1.294 | 0.083 | 0.212 | 0.298 |
| Paid for sex past 12 months | 0.001 | 0.001 | 1186 | 1349 | 0.928 | 0.707 | 0.000 | 0.004 |
| HIV prevalence (15-49) | 0.184 | 0.017 | 1018 | 1223 | 1.403 | 0.093 | 0.150 | 0.218 |
| HIV prevalence (15-24) | 0.062 | 0.010 | 562 | 673 | 1.032 | 0.170 | 0.041 | 0.083 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| HIV prevalence (15-49) | 0.249 | 0.015 | 2362 | 2682 | 1.687 | 0.060 | 0.219 | 0.280 |
| HIV prevalence (15-24) | 0.135 | 0.013 | 1200 | 1369 | 1.277 | 0.093 | 0.110 | 0.161 |


| Variable | Value <br> (R) | Stand- <br> ard <br> error <br> (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.064 | 0.009 | 1083 | 1033 | 1.272 | 0.148 | 0.045 | 0.083 |
| Literate | 0.928 | 0.011 | 1083 | 1033 | 1.335 | 0.011 | 0.907 | 0.949 |
| No education | 0.059 | 0.009 | 1083 | 1033 | 1.256 | 0.153 | 0.041 | 0.077 |
| Secondary education or higher | 0.589 | 0.020 | 1083 | 1033 | 1.330 | 0.034 | 0.549 | 0.629 |
| Net attendance ratio for primary school | 0.782 | 0.024 | 1079 | 1144 | 1.608 | 0.030 | 0.735 | 0.830 |
| Never married | 0.571 | 0.014 | 1083 | 1033 | 0.939 | 0.025 | 0.542 | 0.599 |
| Currently married/in union | 0.351 | 0.013 | 1083 | 1033 | 0.915 | 0.038 | 0.324 | 0.378 |
| Married before age 20 | 0.173 | 0.014 | 783 | 732 | 1.013 | 0.079 | 0.145 | 0.200 |
| Had sexual intercourse before age 18 | 0.509 | 0.021 | 783 | 732 | 1.147 | 0.040 | 0.468 | 0.550 |
| Currently pregnant | 0.057 | 0.008 | 1083 | 1033 | 1.068 | 0.132 | 0.042 | 0.072 |
| Children ever born | 2.220 | 0.064 | 1083 | 1033 | 0.862 | 0.029 | 2.093 | 2.348 |
| Children surviving | 2.017 | 0.061 | 1083 | 1033 | 0.896 | 0.030 | 1.895 | 2.139 |
| Children ever born to women age 40-49 | 5.545 | 0.288 | 155 | 149 | 1.266 | 0.052 | 4.969 | 6.120 |
| Knows any contraceptive method | 1.000 | 0.000 | 385 | 363 | na | 0.000 | 1.000 | 1.000 |
| Ever using contraceptive method | 0.880 | 0.027 | 385 | 363 | 1.625 | 0.031 | 0.827 | 0.934 |
| Currently using any contraceptive method | 0.456 | 0.034 | 385 | 363 | 1.327 | 0.074 | 0.388 | 0.523 |
| Currently using pill | 0.072 | 0.014 | 385 | 363 | 1.078 | 0.197 | 0.044 | 0.101 |
| Currently using IUD | 0.009 | 0.005 | 385 | 363 | 1.046 | 0.557 | 0.000 | 0.019 |
| Currently using female sterilization | 0.055 | 0.013 | 385 | 363 | 1.093 | 0.232 | 0.029 | 0.080 |
| Currently using rhythm method | 0.006 | 0.003 | 385 | 363 | 0.900 | 0.612 | 0.000 | 0.012 |
| Obtained method from public-sector source | 0.528 | 0.032 | 354 | 325 | 1.205 | 0.061 | 0.464 | 0.592 |
| Want no more children | 0.698 | 0.028 | 385 | 363 | 1.193 | 0.04 | 0.643 | 0.754 |
| Want to delay birth at least 2 years | 0.153 | 0.024 | 385 | 363 | 1.284 | 0.154 | 0.106 | 0.200 |
| Ideal family size | 2.589 | 0.052 | 1075 | 1026 | 1.310 | 0.020 | 2.486 | 2.693 |
| Perinatal mortality (0-4 years) | 31.054 | 4.683 | 646 | 626 | 0.641 | 0.151 | 21.689 | 40.420 |
| Mothers received tetanus injection for last birth | 0.711 | 0.022 | 481 | 460 | 1.082 | 0.031 | 0.667 | 0.756 |
| Mothers received medical assistance at delivery | 0.659 | 0.022 | 633 | 615 | 1.054 | 0.034 | 0.615 | 0.704 |
| Had diarrhoea in two weeks before survey | 0.144 | 0.015 | 571 | 558 | 0.950 | 0.102 | 0.115 | 0.174 |
| Treated with oral rehydration salts (ORS) | 0.870 | 0.037 | 85 | 81 | 0.987 | 0.042 | 0.797 | 0.943 |
| Taken to a health provider | 0.708 | 0.065 | 85 | 81 | 1.216 | 0.092 | 0.577 | 0.838 |
| Vaccination card seen | 0.835 | 0.029 | 116 | 111 | 0.848 | 0.035 | 0.776 | 0.893 |
| Received BCG | 0.972 | 0.018 | 116 | 111 | 1.151 | 0.018 | 0.937 | 1.000 |
| Received DPT (3 doses) | 0.926 | 0.019 | 116 | 111 | 0.768 | 0.020 | 0.889 | 0.964 |
| Received polio (3 doses) | 0.875 | 0.022 | 116 | 111 | 0.726 | 0.025 | 0.831 | 0.920 |
| Received measles Fully immunized | 0.916 | 0.025 | 116 | 111 | 0.981 | 0.028 | 0.866 | 0.967 |
| Fully immunized | 0.837 0.289 | 0.026 | 116 | 111 | 0.762 | 0.031 | 0.784 | 0.889 |
| Height-for-age (below -2SD) Weight-for-height (below -2SD) | 0.289 | 0.019 | 694 | 745 | 1.103 | 0.065 | 0.252 | 0.327 |
| Weight-for-height (below -2SD) | 0.021 | 0.006 | 694 | 745 | 1.145 | 0.296 | 0.009 | 0.033 |
| Weight-for-age (below-2SD) | 0.052 0.402 | 0.007 | 694 | 745 | 0.866 | 0.139 | 0.038 | 0.067 |
| Anaemia in children Anaemia in women | 0.402 0.322 | 0.029 | 631 | 680 | 1.544 | 0.073 | 0.344 | 0.461 |
| Anaemia in women $\mathrm{BMI}<18.5$ | 0.322 0.036 | 0.016 | 1010 | 968 | 1.084 | 0.049 | 0.290 | 0.354 |
| $\begin{aligned} & \mathrm{BMI}\end{aligned}<18.5$ Use condom at last high-risk sex | 0.036 0.522 | 0.006 | 988 | 945 | 0.996 | 0.164 | 0.024 | 0.048 |
| Use condom at last high-risk sex Use condom at last high-risk sex - 15-24 | 0.522 | 0.024 | 366 | 339 | 0.903 | 0.045 | 0.475 | 0.569 |
| Use condom at last high-risk sex-15-24 Had high-risk intercourse | 0.532 0.499 | 0.032 0.019 | 218 728 | 209 | 0.952 1.025 | 0.061 0.038 | 0.467 0.461 | 0.596 |
| Abstinence among youth (never had sex) | 0.467 | 0.020 | 464 | 458 | 0.867 | 0.043 | 0.426 | 0.507 |
| Sexually active past 12 months never married youth | 0.449 | 0.024 | 464 | 458 | 1.054 | 0.054 | 0.400 | 0.498 |
| Had injection past 12 months | 0.401 | 0.022 | 1083 | 1033 | 1.495 | 0.056 | 0.356 | 0.445 |
| Accepting attitudes to people with HIV | 0.398 | 0.021 | 1081 | 1031 | 1.398 | 0.052 | 0.356 | 0.439 |
| HIV test and result in past 12 months | 0.210 | 0.011 | 1083 | 1033 | 0.907 | 0.054 | 0.187 | 0.232 |
| Total fertility rate (past 3 years) | 4.280 | 0.245 | na | 2823 | 1.249 | 0.057 | 3.789 | 4.771 |
| Neonatal mortality (past 10 years) | 15.531 | 3.435 | 1178 | 1132 | 0.882 | 0.221 | 8.662 | 22.400 |
| Post-neonatal mortality (past 10 years) | 60.446 | 7.405 | 1178 | 1132 | 0.988 | 0.123 | 45.636 | 75.256 |
| Infant mortality (past 10 years) | 75.977 | 8.136 | 1179 | 1133 | 0.980 | 0.107 | 59.705 | 92.248 |
| Child mortality (past 10 years) | 25.584 | 5.158 | 1180 | 1133 | 1.034 | 0.202 | 15.267 | 35.901 |
| Under-five mortality (past 10 years) | 99.617 | 9.688 | 1182 | 1135 | 1.001 | 0.097 | 80.240 | 118.994 |
| HIV prevalence (15-49) | 0.291 | 0.015 | 1011 | 917 | 1.015 | 0.050 | 0.262 | 0.320 |
| HIV prevalence for pregnant women (15-49) | 0.358 | 0.057 | 61 | 53 | 0.923 | 0.159 | 0.244 | 0.472 |
| HIV prevalence (15-24) | 0.219 | 0.018 | 492 | 459 | 0.978 | 0.083 | 0.182 | 0.255 |
| Continued... |  |  |  |  |  |  |  |  |


| Table B.7-Continued |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

na $=$ Not applicable

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.216 | 0.021 | 1166 | 966 | 1.769 | 0.099 | 0.174 | 0.259 |
| Literate | 0.843 | 0.012 | 1166 | 966 | 1.116 | 0.014 | 0.819 | 0.867 |
| No education | 0.154 | 0.013 | 1166 | 966 | 1.187 | 0.081 | 0.129 | 0.179 |
| Secondary education or higher | 0.453 | 0.021 | 1166 | 966 | 1.436 | 0.046 | 0.411 | 0.495 |
| Net attendance ratio for primary school | 0.840 | 0.022 | 1016 | 940 | 1.636 | 0.026 | 0.796 | 0.883 |
| Never married | 0.442 | 0.016 | 1166 | 966 | 1.094 | 0.036 | 0.410 | 0.474 |
| Currently married/in union | 0.465 | 0.015 | 1166 | 966 | 1.018 | 0.032 | 0.435 | 0.495 |
| Married before age 20 | 0.292 | 0.024 | 862 | 712 | 1.521 | 0.081 | 0.245 | 0.339 |
| Had sexual intercourse before age 18 | 0.555 | 0.020 | 862 | 712 | 1.160 | 0.035 | 0.515 | 0.594 |
| Currently pregnant | 0.059 | 0.008 | 1166 | 966 | 1.181 | 0.138 | 0.043 | 0.075 |
| Children ever born | 2.589 | 0.106 | 1166 | 966 | 1.350 | 0.041 | 2.377 | 2.801 |
| Children surviving | 2.277 | 0.093 | 1166 | 966 | 1.324 | 0.041 | 2.092 | 2.463 |
| Children ever born to women age 40-49 | 5.639 | 0.254 | 227 | 187 | 1.322 | 0.045 | 5.131 | 6.148 |
| Knows any contraceptive method | 1.000 | 0.000 | 536 | 449 | na | 0.000 | 1.000 | 1.000 |
| Ever using contraceptive method | 0.894 | 0.016 | 536 | 449 | 1.225 | 0.018 | 0.861 | 0.926 |
| Currently using any contraceptive method | 0.480 | 0.023 | 536 | 449 | 1.072 | 0.048 | 0.433 | 0.526 |
| Currently using pill | 0.098 | 0.015 | 536 | 449 | 1.174 | 0.154 | 0.068 | 0.128 |
| Currently using IUD iliza | 0.011 | 0.005 | 536 | 449 | 1.103 | 0.445 | 0.001 | 0.021 |
| Currently using female sterilization | 0.075 | 0.014 | 536 | 449 | 1.256 | 0.191 | 0.046 | 0.103 |
| Currently using rhythm method | 0.002 | 0.002 | 536 | 449 | 1.061 | 1.004 | 0.000 | 0.006 |
| Obtained method from public-sector source | 0.502 | 0.031 | 433 | 345 | 1.289 | 0.062 | 0.440 | 0.564 |
| Want no more children | 0.66 | 0.025 | 536 | 449 | 1.227 | 0.038 | 0.61 | 0.71 |
| Want to delay birth at least 2 years | 0.170 | 0.017 | 536 | 449 | 1.037 | 0.099 | 0.136 | 0.203 |
| Ideal family size | 2.695 | 0.077 | 1157 | 959 | 1.555 | 0.029 | 2.541 | 2.849 |
| Perinatal mortality (0-4 years) . | 33.539 | 8.189 | 713 | 590 | 1.045 | 0.244 | 17.161 | 49.916 |
| Mothers received tetanus injection for last birth | 0.606 | 0.026 | 526 | 434 | 1.238 | 0.044 | 0.553 | 0.659 |
| Mothers received medical assistance at delivery | 0.695 | 0.027 | 698 | 577 | 1.355 | 0.039 | 0.641 | 0.748 |
| Had diarrhoea in two weeks before survey | 0.174 | 0.024 | 623 | 517 | 1.554 | 0.141 | 0.125 | 0.222 |
| Treated with oral rehydration salts (ORS) | 0.862 | 0.035 | 113 | 90 | 1.071 | 0.041 | 0.791 | 0.933 |
| Taken to a health provider | 0.779 | 0.051 | 113 | 90 | 1.231 | 0.065 | 0.677 | 0.881 |
| Vaccination card seen | 0.805 | 0.036 | 137 | 110 | 1.051 | 0.045 | 0.732 | 0.877 |
| Received BCG | 0.979 | 0.012 | 137 | 110 | 0.940 | 0.012 | 0.956 | 1.000 |
| Received DPT (3 doses) | 0.864 | 0.024 | 137 | 110 | 0.796 | 0.028 | 0.816 | 0.911 |
| Received polio (3 doses) | 0.828 | 0.031 | 137 | 110 | 0.946 | 0.038 | 0.766 | 0.890 |
| Received measles | 0.900 | 0.021 | 137 | 110 | 0.821 | 0.024 | 0.857 | 0.942 |
| Fully immunized | 0.761 | 0.032 | 137 | 110 | 0.864 | 0.042 | 0.697 | 0.825 |
| Height-for-age (below -2SD) | 0.244 | 0.019 | 641 | 571 | 1.101 | 0.078 | 0.206 | 0.282 |
| Weight-for-height (below-2SD) | 0.025 | 0.004 | 641 | 571 | 0.753 | 0.178 | 0.016 | 0.034 |
| Weight-for-age (below -2SD) | 0.037 | 0.008 | 641 | 571 | 1.094 | 0.210 | 0.021 | 0.052 |
| Anaemia in children | 0.377 | 0.024 | 595 | 529 | 1.249 | 0.063 | 0.330 | 0.425 |
| Anaemia in women | 0.262 | 0.018 | 1088 | 900 | 1.339 | 0.068 | 0.226 | 0.297 |
| $\mathrm{BMI}<18.5$ | 0.037 | 0.007 | 1057 | 870 | 1.207 | 0.189 | 0.023 | 0.051 |
| Use condom at last high-risk sex | 0.442 | 0.034 | 353 | 291 | 1.286 | 0.077 | 0.374 | 0.510 |
| Use condom at last high-risk sex-15-24 | 0.455 | 0.039 | 215 | 184 | 1.144 | 0.086 | 0.377 | 0.533 |
| Had high-risk intercourse | 0.409 | 0.017 | 855 | 711 | 1.039 | 0.043 | 0.374 | 0.444 |
| Abstinence among youth (never had sex) . | 0.415 | 0.041 | 410 | 342 | 1.687 | 0.099 | 0.333 | 0.498 |
| Sexually active past 12 months never married youth | 0.508 | 0.042 | 410 | 342 | 1.691 | 0.082 | 0.424 | 0.592 |
| Had injection past 12 months | 0.391 | 0.016 | 1166 | 966 | 1.105 | 0.040 | 0.359 | 0.423 |
| Accepting attitudes to people with HIV | 0.390 | 0.016 | 1163 | 964 | 1.105 | 0.041 | 0.358 | 0.421 |
| HIV test and result in past 12 months | 0.222 | 0.015 | 1166 | 966 | 1.217 | 0.067 | 0.192 | 0.252 |
| Total fertility rate (past 3 years) | 4.022 | 0.288 | na | 2656 | 1.423 | 0.072 | 3.445 | 4.598 |
| Neonatal mortality (past 10 years) | 15.471 | 3.432 | 1336 | 1104 | 1.039 | 0.222 | 8.607 | 22.335 |
| Post-neonatal mortality (past 10 years) | 63.211 | 8.615 | 1337 | 1105 | 1.110 | 0.136 | 45.980 | 80.441 |
| Infant mortality (past 10 years) | 78.682 | 8.492 | 1337 | 1105 | 0.998 | 0.108 | 61.699 | 95.666 |
| Child mortality (past 10 years) | 39.223 | 5.342 | 1340 | 1107 | 0.830 | 0.136 | 28.538 | 49.907 |
| Under-five mortality (past 10 years) | 114.819 | 9.128 | 1341 | 1109 | 0.914 | 0.080 | 96.562 | 133.075 |
| HIV prevalence (15-49) | 0.310 | 0.016 | 1083 | 855 | 1.162 | 0.053 | 0.277 | 0.342 |
| HIV prevalence for pregnant women (15-49) | 0.349 | 0.056 | 60 | 50 | 0.909 | 0.161 | 0.237 | 0.462 |
| HIV prevalence (15-24) | 0.205 | 0.021 | 510 | 403 | 1.153 | 0.101 | 0.163 | 0.246 |
| Continued... |  |  |  |  |  |  |  |  |


| Table B.8-Continued |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
|  |  |  |  | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.306 | 0.017 | 1113 | 865 | 1.265 | 0.057 | 0.271 | 0.341 |
| Literate | 0.845 | 0.011 | 1113 | 865 | 1.019 | 0.013 | 0.823 | 0.868 |
| No education | 0.122 | 0.011 | 1113 | 865 | 1.112 | 0.089 | 0.100 | 0.144 |
| Secondary education or higher | 0.454 | 0.024 | 1113 | 865 | 1.601 | 0.053 | 0.406 | 0.502 |
| Never married | 0.612 | 0.018 | 1113 | 865 | 1.213 | 0.029 | 0.577 | 0.648 |
| Currently married/in union | 0.332 | 0.018 | 1113 | 865 | 1.287 | 0.055 | 0.295 | 0.368 |
| Married before age 20 | 0.087 | 0.009 | 809 | 593 | 0.905 | 0.103 | 0.069 | 0.105 |
| Had sexual intercourse before 18 | 0.309 | 0.023 | 809 | 593 | 1.399 | 0.074 | 0.263 | 0.354 |
| Children ever born | 4.226 | 0.201 | 405 | 287 | 1.288 | 0.048 | 3.825 | 4.628 |
| Ever used any contraceptive method | 0.856 | 0.019 | 405 | 287 | 1.111 | 0.023 | 0.817 | 0.894 |
| Knows any contraceptive method | 1.000 | 0.000 | 405 | 287 | na | 0.000 | 1.000 | 1.000 |
| Want no more children | 0.504 | 0.028 | 405 | 287 | 1.128 | 0.056 | 0.448 | 0.561 |
| Want to delay birth at least 2 years | 0.238 | 0.024 | 405 | 287 | 1.120 | 0.100 | 0.191 | 0.286 |
| Ideal family size | 3.293 | 0.066 | 1102 | 857 | 1.130 | 0.020 | 3.162 | 3.425 |
| Use condom at last high-risk sex | 0.636 | 0.031 | 388 | 292 | 1.252 | 0.048 | 0.575 | 0.697 |
| Condom use last higher-risk intercourse (youth) | 0.630 | 0.047 | 180 | 140 | 1.296 | 0.074 | 0.536 | 0.723 |
| Abstinence among youth (never had intercourse) | 0.588 | 0.020 | 497 | 419 | 0.918 | 0.034 | 0.548 | 0.629 |
| Sexually active past 12 months (never-married youth) | 0.332 | 0.022 | 497 | 419 | 1.021 | 0.065 | 0.289 | 0.375 |
| Had injection past 12 months | 0.237 | 0.014 | 1113 | 865 | 1.091 | 0.059 | 0.209 | 0.265 |
| Accepting attitudes to people with HIV | 0.431 | 0.014 | 1102 | 854 | 0.931 | 0.032 | 0.403 | 0.459 |
| HIV test and result in past 12 months | 0.111 | 0.012 | 1113 | 865 | 1.292 | 0.109 | 0.087 | 0.136 |
| Multi partners in past 12 months | 0.234 | 0.017 | 732 | 536 | 1.113 | 0.074 | 0.200 | 0.269 |
| Paid for sex past 12 months | 0.001 | 0.001 | 1113 | 865 | 0.805 | 1.004 | 0.000 | 0.002 |
| HIV prevalence (15-49) | 0.209 | 0.014 | 970 | 776 | 1.077 | 0.067 | 0.181 | 0.238 |
| HIV prevalence (15-24) | 0.063 | 0.011 | 476 | 409 | 0.944 | 0.166 | 0.042 | 0.084 |
| WOMEN AND MEN |  |  |  |  |  |  |  |  |
| HIV prevalence (15-49) | 0.262 | 0.012 | 2053 | 1631 | 1.250 | 0.046 | 0.238 | 0.286 |
| HIV prevalence (15-24) | 0.134 | 0.012 | 986 | 812 | 1.075 | 0.087 | 0.110 | 0.157 |

na $=$ Not applicable

| Variable | Value <br> (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Un- | Weight- |  |  |  |  |
|  |  |  | (N) | (WN) |  |  | R-2SE | $\mathrm{R}+2 \mathrm{SE}$ |
| GIRLS |  |  |  |  |  |  |  |  |
| Urban residence (12-14) | 0.122 | 0.011 | 459 | 465 | 0.695 | 0.087 | 0.101 | 0.143 |
| Has heard of HIV/AIDS (12-14) | 0.978 | 0.007 | 459 | 465 | 0.990 | 0.007 | 0.965 | 0.992 |
| HIV prevalence (2-14) | 0.038 | 0.005 | 1828 | 1837 | 1.092 | 0.129 | 0.028 | 0.047 |
| BOYS |  |  |  |  |  |  |  |  |
| Urban residence (12-14) | 0.117 | 0.011 | 411 | 409 | 0.703 | 0.096 | 0.094 | 0.139 |
| Has heard of HIV/AIDS (12-14) | 0.965 | 0.009 | 411 | 409 | 1.045 | 0.010 | 0.946 | 0.984 |
| HIV prevalence (2-14) | 0.039 | 0.005 | 1745 | 1740 | 1.056 | 0.126 | 0.029 |  |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence (50+) | 0.129 | 0.011 | 661 | 669 | 0.823 |  |  |  |
| Has heard of HIV/AIDS 50+) | 0.962 | 0.008 | 661 | 669 | 1.078 | 0.008 | 0.946 | $0.978$ |
| HIV prevalence for elder people (50+) | 0.117 | 0.012 | 597 | 588 | 0.944 | 0.106 | $0.092$ | $0.141$ |
| HIV prevalence (2+) | 0.221 | 0.006 | 7009 | 6849 | 1.308 | 0.029 | 0.208 | 0.234 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence (50+) | 0.177 | 0.011 | 456 | 444 | 0.618 | 0.062 | $0.155$ |  |
| Has heard of HIV/AIDS (50+) | 0.974 | 0.008 | 456 | 444 | 1.062 | 0.008 | 0.958 | $0.990$ |
| HIV prevalence for elder people (50+) | 0.179 | 0.021 | 396 | 402 | 1.063 | 0.114 | 0.138 | $0.220$ |
| HIV prevalence (2+) | 0.149 | 0.006 | 5743 | 5905 | 1.362 | 0.043 | 0.136 | 0.162 |


| Table C. 1 Household age distribution |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Single-year age distribution of the de facto household population by sex (weighted), Swaziland 2006-07 |  |  |  |  |  |  |  |  |  |
| Age | Female |  | Male |  | Age | Female |  | Male |  |
|  | Number | Percent | Number | Percent |  | Number | Percent | Number | Percent |
| 0 | 326 | 2.7 | 337 | 3.2 | 36 | 119 | 1.0 | 97 | 0.9 |
| 1 | 301 | 2.5 | 325 | 3.1 | 37 | 99 | 0.8 | 69 | 0.6 |
| 2 | 317 | 2.6 | 307 | 2.9 | 38 | 153 | 1.3 | 121 | 1.1 |
| 3 | 345 | 2.9 | 322 | 3.0 | 39 | 87 | 0.7 | 60 | 0.6 |
| 4 | 364 | 3.0 | 333 | 3.1 | 40 | 111 | 0.9 | 82 | 0.8 |
| 5 | 315 | 2.6 | 296 | 2.8 | 41 | 97 | 0.8 | 58 | 0.5 |
| 6 | 307 | 2.6 | 360 | 3.4 | 42 | 109 | 0.9 | 67 | 0.6 |
| 7 | 319 | 2.7 | 290 | 2.7 | 43 | 88 | 0.7 | 42 | 0.4 |
| 8 | 343 | 2.9 | 335 | 3.2 | 44 | 78 | 0.7 | 57 | 0.5 |
| 9 | 305 | 2.5 | 329 | 3.1 | 45 | 88 | 0.7 | 43 | 0.4 |
| 10 | 365 | 3.0 | 357 | 3.4 | 46 | 93 | 0.8 | 80 | 0.8 |
| 11 | 343 | 2.9 | 293 | 2.8 | 47 | 98 | 0.8 | 49 | 0.5 |
| 12 | 319 | 2.7 | 327 | 3.1 | 48 | 83 | 0.7 | 64 | 0.6 |
| 13 | 324 | 2.7 | 329 | 3.1 | 49 | 53 | 0.4 | 48 | 0.5 |
| 14 | 404 | 3.4 | 355 | 3.4 | 50 | 83 | 0.7 | 52 | 0.5 |
| 15 | 263 | 2.2 | 290 | 2.7 | 51 | 64 | 0.5 | 53 | 0.5 |
| 16 | 309 | 2.6 | 347 | 3.3 | 52 | 78 | 0.6 | 62 | 0.6 |
| 17 | 276 | 2.3 | 281 | 2.6 | 53 | 77 | 0.6 | 44 | 0.4 |
| 18 | 280 | 2.3 | 287 | 2.7 | 54 | 91 | 0.8 | 62 | 0.6 |
| 19 | 264 | 2.2 | 223 | 2.1 | 55 | 43 | 0.4 | 43 | 0.4 |
| 20 | 266 | 2.2 | 259 | 2.4 | 56 | 68 | 0.6 | 55 | 0.5 |
| 21 | 247 | 2.1 | 175 | 1.7 | 57 | 50 | 0.4 | 33 | 0.3 |
| 22 | 231 | 1.9 | 213 | 2.0 | 58 | 50 | 0.4 | 32 | 0.3 |
| 23 | 216 | 1.8 | 182 | 1.7 | 59 | 51 | 0.4 | 47 | 0.4 |
| 24 | 201 | 1.7 | 181 | 1.7 | 60 | 75 | 0.6 | 57 | 0.5 |
| 25 | 177 | 1.5 | 161 | 1.5 | 61 | 75 | 0.6 | 68 | 0.6 |
| 26 | 194 | 1.6 | 150 | 1.4 | 62 | 41 | 0.3 | 40 | 0.4 |
| 27 | 175 | 1.5 | 139 | 1.3 | 63 | 52 | 0.4 | 21 | 0.2 |
| 28 | 146 | 1.2 | 134 | 1.3 | 64 | 51 | 0.4 | 46 | 0.4 |
| 29 | 129 | 1.1 | 136 | 1.3 | 65 | 42 | 0.4 | 28 | 0.3 |
| 30 | 163 | 1.4 | 109 | 1.0 | 66 | 56 | 0.5 | 46 | 0.4 |
| 31 | 126 | 1.0 | 116 | 1.1 | 67 | 39 | 0.3 | 19 | 0.2 |
| 32 | 134 | 1.1 | 98 | 0.9 | 68 | 31 | 0.3 | 19 | 0.2 |
| 33 | 124 | 1.0 | 86 | 0.8 | 69 | 29 | 0.2 | 7 | 0.1 |
| 34 | 116 | 1.0 | 87 | 0.8 | 70+ | 361 | 3.0 | 199 | 1.9 |
| 35 | 111 | 0.9 | 84 | 0.8 | Don't know/ missing | 3 | 0.0 | 1 | 0.0 |
|  |  |  |  |  | Total | 12,008 | 100.0 | 10,604 | 100.0 |

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women
De facto household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by five-year age groups, Swaziland 2006-07

|  | Household <br> population <br> of women <br> age 10-54 | Interviewed women <br> age 15-49 |  | Percent of <br> women |
| :--- | :---: | :---: | :---: | :---: |
| Age group | 1,754 | na | namber | Percent |
| $10-14$ | 1,392 | 1,325 | 25.6 | na |
| $15-19$ | 1,161 | 1,088 | 21.0 | 93.2 |
| $20-24$ | 821 | 755 | 14.6 | 91.9 |
| $25-29$ | 663 | 627 | 12.1 | 94.6 |
| $30-34$ | 569 | 531 | 10.3 | 93.4 |
| $25-39$ | 483 | 450 | 8.7 | 93.2 |
| $40-44$ | 415 | 400 | 7.7 | 96.5 |
| $45-49$ | 392 | na | na | na |
| $50-54$ |  |  | 100.0 | 94.1 |
| $15-49$ | 5,503 | 5,177 | 100 |  |

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule.
na $=$ Not applicable

## Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-64, interviewed men aged 15-59 and percent of eligible men who were interviewed (weighted), Swaziland 2006-07

| Age group | Household population of men age 10-64 | Interviewed men age 15-59 |  | Percentage of eligible men interviewed |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percent |  |
| 10-14 | 770 | na | na | na |
| 15-19 | 692 | 1,326 | 32.0 | 191.5 |
| 20-24 | 509 | 875 | 21.2 | 171.9 |
| 25-29 | 366 | 619 | 15.0 | 169.2 |
| 30-34 | 229 | 427 | 10.3 | 186.9 |
| 25-39 | 207 | 370 | 9.0 | 179.0 |
| 40-44 | 144 | 264 | 6.4 | 183.8 |
| 45-49 | 136 | 256 | 6.2 | 188.0 |
| 50-54 | 132 | 0.0 | 0.0 | 0.0 |
| 55-59 | 93 | 0.0 | 0.0 | 0.0 |
| 60-64 | 120 | na | na | na |
| 15-59 | 2,507 | 4,137 | 100.0 | 165.0 |

na $=$ Not applicable

| Table C. 3 Completeness of reporting |  |  |  |
| :---: | :---: | :---: | :---: |
| Percentage of observations missing information for selected demographic and health questions (weighted), Swaziland 2006-07 |  |  |  |
| Age group | Reference population | Percentage with missing information | Number of cases |
| Birth date | Births in the 15 years preceding the survey |  |  |
| Month only |  | 0.46 | 7,518 |
| Month and year |  | 0.16 | 7,518 |
| Age at death | Deaths among births in the 15 years preceding the survey | 0.12 | 694 |
| Age/date at first union ${ }^{1}$ | All women age 15-49 | 0.04 | 2,500 |
| Respondent's education | All women age 15-49 | 0.10 | 4,987 |
| Diarrhoea in past 2 weeks | Living children age 0-59 months | 4.75 | 2,553 |
| Anthropometry | Living children age 0-59 months (from household questionnaire) |  |  |
| Height |  | 6.19 | 3,301 |
| Weight |  | 6.18 | 3,301 |
| Height or weight |  | 6.24 | 3,301 |
| ${ }^{1}$ Both year and age missing |  |  |  |

## Table C. 4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Swaziland 2006-07

| Calendar year | Number of births |  |  | Percentage with complete birth date |  |  | Sex ratio at birth |  |  | Calendar year ratio |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | L | D | T | L | D | T | L | D | T | L | D | T |
| 2001 | 9 | 1 | 10 | 100.0 | 100.0 | 100.0 | na | 0.0 | 1,102.7 | na | na | na |
| 2000 | 478 | 35 | 513 | 100.0 | 100.0 | 100.0 | 102.8 | 101.3 | 102.7 | na | na | na |
| 1999 | 534 | 49 | 584 | 100.0 | 100.0 | 100.0 | 106.2 | 101.5 | 105.8 | 109.0 | 89.4 | 107.0 |
| 1998 | 502 | 76 | 578 | 100.0 | 100.0 | 100.0 | 101.7 | 112.9 | 103.1 | 97.1 | 140.3 | 101.2 |
| 1997 | 499 | 59 | 558 | 100.0 | 100.0 | 100.0 | 97.2 | 84.4 | 95.7 | 102.1 | 89.8 | 100.7 |
| 1996 | 476 | 55 | 530 | 100.0 | 100.0 | 100.0 | 98.9 | 92.3 | 98.2 | 104.4 | 111.3 | 105.1 |
| 1995 | 412 | 40 | 451 | 100.0 | 100.0 | 100.0 | 93.9 | 111.8 | 95.4 | 81.6 | 61.0 | 79.3 |
| 1994 | 533 | 75 | 608 | 98.9 | 98.0 | 98.8 | 121.3 | 84.3 | 116.0 | 122.5 | 178.8 | 127.4 |
| 1993 | 459 | 44 | 504 | 99.1 | 94.7 | 98.7 | 98.7 | 136.2 | 101.5 | 94.1 | 65.2 | 90.5 |
| 1992 | 443 | 61 | 504 | 99.8 | 94.6 | 99.2 | 86.4 | 135.2 | 91.2 | 100.7 | 147.5 | 104.7 |
| 1997-2001 | 2,023 | 220 | 2,242 | 100.0 | 100.0 | 100.0 | 102.9 | 99.5 | 102.5 | na | na | na |
| 1992-1996 | 2,322 | 275 | 2,597 | 99.5 | 97.4 | 99.3 | 100.0 | 107.3 | 100.8 | na | na | na |
| 1987-1991 | 2,033 | 166 | 2,199 | 99.3 | 94.5 | 99.0 | 98.2 | 130.5 | 100.3 | na | na | na |
| 1982-1986 | 1,718 | 106 | 1,824 | 99.0 | 92.1 | 98.6 | 100.7 | 119.8 | 101.7 | na | na | na |
| <1982 | 2,151 | 369 | 2,520 | 99.0 | 95.0 | 98.4 | 103.6 | 95.4 | 102.4 | na | na | na |
| All | 10,247 | 1,135 | 11,383 | 99.4 | 96.2 | 99.1 | 101.1 | 105.8 | 101.5 | na | na | na |

[^30]| Table C. 5 Reporting of age at death in days |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Swaziland 2006-07 |  |  |  |  |  |
| Age at death | Number of years preceding the survey |  |  |  |  |
| (days) | 0-4 | 5-9 | 10-14 | 15-19 | Total 0-19 |
| <1 | 15 | 23 | 7 | 6 | 51 |
| 1 | 16 | 15 | 18 | 8 | 57 |
| 2 | 6 | 2 | 5 | 2 | 15 |
| 3 | 4 | 3 | 2 | 3 | 11 |
| 4 | 4 | 1 | 1 | 0 | 5 |
| 5 | 3 | 4 | 1 | 1 | 9 |
| 6 | 1 | 1 | 0 | 0 | 2 |
| 7 | 10 | 8 | 7 | 1 | 25 |
| 8 | 0 | 0 | 0 | 1 | 1 |
| 11 | 0 | 1 | 0 | 0 | 1 |
| 12 | 0 | 0 | 0 | 1 | 1 |
| 14 | 1 | 1 | 1 | 0 | 3 |
| 20 | 1 | 0 | 2 | 0 | 3 |
| 21 | 0 | 2 | 1 | 0 | 3 |
| 25 | 0 | 2 | 0 | 0 | 2 |
| Total 0-30 | 61 | 61 | 45 | 22 | 189 |
| Percent early neonatal ${ }^{1}$ | 80.6 | 78.3 | 74.8 | 89.5 | 79.5 |
| ${ }^{1}=6$ days $/=30$ days |  |  |  |  |  |


| Table C. 6 Reporting of age at death in months |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Swaziland 2006-07 |  |  |  |  |  |
| Age at death | Number of years preceding the survey |  |  |  |  |
| (months) | 0-4 | 5-9 | 10-14 | 15-19 | Total 0-19 |
| $<1^{\text {a }}$ | 61 | 61 | 45 | 22 | 189 |
| 1 | 15 | 14 | 4 | 4 | 37 |
| 2 | 24 | 11 | 2 | 2 | 38 |
| 3 | 36 | 17 | 7 | 4 | 64 |
| 4 | 17 | 16 | 5 | 2 | 40 |
| 5 | 21 | 12 | 1 | 6 | 39 |
| 6 | 15 | 20 | 4 | 4 | 43 |
| 7 | 9 | 11 | 2 | 0 | 23 |
| 8 | 10 | 4 | 6 | 0 | 20 |
| 9 | 11 | 7 | 9 | 2 | 29 |
| 10 | 5 | 1 | 0 | 1 | 7 |
| 11 | 0 | 4 | 2 | 0 | 6 |
| 12 | 14 | 17 | 12 | 5 | 48 |
| 13 | 3 | 1 | 0 | 0 | 4 |
| 14 | 0 | 3 | 0 | 0 | 3 |
| 15 | 1 | 1 | 1 | 0 | 3 |
| 16 | 4 | 0 | 2 | 0 | 6 |
| 18 | 6 | 4 | 2 | 2 | 13 |
| 19 | 1 | 1 | 0 | 0 | 2 |
| 20 | 0 | 0 | 0 | 0 | 0 |
| 21 | 0 | 1 | 0 | 0 | 1 |
| 22 | 1 | 0 | 0 | 0 | 1 |
| 23 | 0 | 0 | 1 | 0 | 1 |
| 1 year | 4 | 4 | 6 | 0 | 14 |
| Total 0-11 | 224 | 177 | 87 | 48 | 535 |
| Percent neonatal | 27.1 | 34.5 | 52.0 | 46.7 | 35.3 |

[^31]
## EFFECT OF NONRESPONSE ON THE SDHS HIV PREVALENCE RESULTS

As was seen earlier in Chapter 14 of this report, not all eligible SDHS respondents participated in the HIV testing component. The potential for bias associated with this nonparticipation is a concern since respondents who refused to be tested or were absent at the time of testing may bias the results if their characteristics or behaviours may be different from those who consented to provide a blood sample. To address these concerns, it has become standard procedure in DHS surveys with an HIV testing component to conduct an analysis of those who are not tested in order to look for potential biases ${ }^{1}$.

Table D. 1 summarizes the results of the nonresponse analysis that was conducted for the 2006-07 SDHS. The table shows the observed HIV rates for women, men, and the total sample and the rates for these groups following an adjustment for nonresponse. Overall, the adjustment for nonresponse raises the HIV prevalence by about 0.1 percentage points above the observed level (from 25.9 percent to 26.0 percent). For women, the adjusted prevalence is 31.0 percent compared with the observed level of 31.1 percent. For men, the effect of the adjustment is slightly bigger, adding about 0.6 percentage points to the observed rate of 19.7 percent. The differences between the observed and adjusted rates were not found to be statistically significant.

| Table D. 1 Observed and adjusted HIV prevalence among women and men |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage HIV positive among women and men age 15-49 who were tested for HIV, by observed and adjusted prevalence and $95 \%$ confidence intervals, Swaziland 2006-07 |  |  |  |  |  |  |
| Sex | Observed HIV prevalence |  |  | Adjusted HIV prevalence |  |  |
|  | Prevalence | 95\% con | ce interval | Prevalence | 95\% con | ce interval |
|  | (R) | R-2SE | R+2SE | (R) | R-2SE | R+2SE |
| Women | 31.1 | 29.8 | 32.5 | 31.0 | 29.8 | 32.2 |
| Men | 19.7 | 18.4 | 21.0 | 20.3 | 19.3 | 21.4 |
| Total | 25.9 | 24.9 | 26.8 | 26.0 | 25.2 | 26.8 |

[^32]Minimizing nonresponse is a major challenge to all population-based surveys. The main reasons are refusal and absence. The analysis of nonresponse in Swaziland is consistent with results from other DHS countries with linked HIV data (Kenya, Ghana, Burkina Faso, Tanzania, Uganda, Cameroon, Malawi, Lesotho, Cambodia, India, Rwanda, Côte d'Ivoire, Ethiopia, and Zimbabwe) and indicates that nonresponse does not bias the national HIV estimates from population-based surveys significantly. The overall effect of nonresponse on the observed national HIV prevalence estimates tends to be small.

It is important to recognize that the adjustments only partially address the nonresponse bias. The estimates can only be adjusted to the extent that the sociodemographic and behavioural characteristics included in the analysis are correlated with the risk of HIV infection in Swaziland. Another limitation is that the adjustments for the "not-interviewed, not-tested" respondents are based on somewhat limited information although variables strongly associated with HIV infection such as age, residence, and education are included.

# PERSONS INVOLVED IN THE 2006-07 SWAZILAND DEMOGRAPHIC AND HEALTH SURVEY 

${ }_{\text {Appendix }} E$

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## QUESTIONNAIRES

Appendix $F$

## 2006 SWAZILAND DEMOGRAPHIC AND HEALTH SURVEY HOUSEHOLD QUESTIONNAIRE



| LINE NO. | USUAL RESIDENTS AND VISITORS | RELATIONSHIP TO HEAD OF HOUSEHOLD | SEX | RESIDENCE |  | AGE |  | ELIGIBILITY |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. <br> AFTER LISTING NAMES, RELATIONSHIPS, AND SEX, ASK Qs. 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-35 FOR EACH MEMBER OF THE HOUSEHOLD. | What is the relationship of (NAME) to the head of the household? <br> SEE CODES BELOW. | Is (NAME) male or female? <br> MALE $=1$ <br> FE- <br> MALE $=2$ | Does (NAME) usually live here? $\begin{aligned} & \text { YES }=1 \\ & \mathrm{NO}=2 \end{aligned}$ | Did (NAME) stay here last night? $\begin{aligned} & \mathrm{YES}=1 \\ & \mathrm{NO}=2 \end{aligned}$ | How old is (NAME)? | MARITAL STATUS <br> What is (NAME'S) current marital status? <br> SEE <br> CODES <br> BELOW. | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> WOMEN <br> AGE <br> 15-49 | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> MEN <br> AGE <br> 15-49 | CIRCLE <br> LINE NUMBER OF ALL PERSONS AGE 12-14 | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> CHILD- <br> REN <br> AGE 0-5 | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> MEN AND <br> WOMEN <br> AGE <br> 50+ |
| (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
| 01 |  |   |  |  |  | IN YEARS |  | 01 | 01 | 01 | 01 | 01 |
| 02 |  |  |  | $\square$ |  |  | $\square$ | 02 | 02 | 02 | 02 | 02 |
| 03 |  |  | $\square$ | $\square$ | $\square$ |  | $\square$ | 03 | 03 | 03 | 03 | 03 |
| 04 |  |   |  |  |  |  |  | 04 | 04 | 04 | 04 | 04 |
| 05 |  |  |  | $\square$ |  |  | $\square$ | 05 | 05 | 05 | 05 | 05 |
| 06 |  |   |  |  |  |  |  | 06 | 06 | 06 | 06 | 06 |
| 07 |  |   |  |  |  |  |  | 07 | 07 | 07 | 07 | 07 |
| 08 |  |   |  |  |  |  |  | 08 | 08 | 08 | 08 | 08 |
| 09 |  |  |  |  | $\qquad$ |  |  | 09 | 09 | 09 | 09 | 09 |
| 10 |  |  |  |  |  |  |  | 10 | 10 | 10 | 10 | 10 |
|  | CODES FOR Q. 3 <br> RELATIONSHIP TO HEAD OF <br> $01=$ HEAD <br> $02=$ WIFE OR HUSBAND/ <br> PARTNER <br> 03 = SON OR DAUGHTER <br> $04=$ SON-IN-LAW OR <br> DAUGHTER-IN-LAW <br> $05=$ GRANDCHILD <br> $06=$ PARENT <br> $07=$ PARENT-IN-LAW | OUSEHOLD: <br> $08=$ BROTHER <br> 09 = NIECE/NEP <br> $10=$ NIECE/NEP <br> 11 = OTHER RE <br> 12 = ADOPTED/ <br> 13 = NOT RELA <br> $98=$ DON'T KNO | OR SISTER HEW BY BL HEW BY MA ATIVE OSTER/ST ED W | OD RIAGE <br> PCHILD | 3 = WIDOWED <br> 4 = NEVER MAR |  | NG TOGET PARATED <br> ED/NEVER | HER <br> LIVED WITH | H A PARTN |  |  |  |


| $\begin{aligned} & \text { LINE } \\ & \text { NO. } \end{aligned}$ | IF AGE $18-59$ YEARS | IF AGE 0-17 YEARS |  |  |  |  |  |  |  | IFAGE 0-17 YEARS |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { SICK } \\ & \text { PERSON } \end{aligned}$ | SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS |  |  |  |  |  |  |  | BROTHERS |  | Sisters |  |
|  | Has (NAME) been very sick for at least three months during the past 12 months? By very sick I mean that (NAME) was too sick to work or do normal activities around the house for at least three of the past 12 months. <br> YES $=1$ <br> NO $=2$ <br> DK $=8$ | Is (NAME)'s natural mother alive? | Does (NAME)'s natural mother live in this household? <br> IF YES: What is her name? <br> RECORD MOTHER'S <br> LINE NO. SEE BELOW. |  | Is (NAME)'s natural father alive? | Does (NAME)'s natural father live in this house- hold? IF YES: What is his name? RECORD FATHER'S LINE NO. SEE BELOW. |  | CHECK <br> QS. 15 <br> TO 20: <br> CIRCLE <br> LINE <br> NUMBER <br> FOR THE <br> CHLD <br> WHOSE <br> MOTHER <br> ANDIOR <br> FATHER <br> HAS DIED <br> (Q. 15 <br> AND 18) <br> OR IS <br> SICK <br> (Q. 17 <br> AND 20). | CHECK <br> Q. 15 AND <br> Q.18: <br> IF YES TO <br> Q.15 AND <br> Q. 18 (BOTH <br> PARENTS <br> ALIIE), <br> CIRCLE ' 1 ', <br> OTHER- <br> WISE <br> CIRCLE '2'. | Does (NAME) have any natural brothers under the age of $18 ?$ By natural brothers, I mean born to the same mother and same father. | Do all of (NAME)'s natural brothers under the age of 18 live in this household? $\mathrm{NO}=2$ | Does (NAME) have any natural sisters under the age of 18? By natura sisters, I mean born to the same mother and same father. | Do all of (NAME)'s natural sisters under the age of 18 live in this household? $\begin{aligned} & \mathrm{YES}=1 \\ & \mathrm{NO}=2 \end{aligned}$ |
| (1) | (14) | (15) | (16) | (17) | (18) | (19) | (20) | (21) | (22) | (23) | (24) | (25) | (26) |
| 01 | $\square$ | $\begin{array}{lll} Y & N & D K \\ 1 & 2 & \nabla^{8} \\ \text { GO } & \tau_{18} & 18 \end{array}$ |  | $\square$ | $\begin{array}{ccc} Y & N & D K \\ 1 & 2 & \nabla^{8} \\ \text { GO TO } & 21 \end{array}$ |  |  | 01 |  | $\left\|\begin{array}{cc} Y & N D K \\ 1 & 2 \\ \text { GO } & \nabla^{2} \\ \text { 25 } \end{array}\right\|$ |  | $\begin{array}{ccc} \text { Y N DK } \\ 1 & 2 & J^{8} \\ \text { 3O TO } 27 \end{array}$ |  |
| 02 |  |  | $1$ |  |  | $1$ |  | 02 |  | $\left\lvert\, \begin{array}{lll} \left.\begin{array}{ll} 1 & 2 \\ \text { GO TO } & \nabla^{8} \end{array} \right\rvert\, \end{array}\right.$ |  | $\left\lvert\, \begin{array}{cc} 1 & 2 \\ \text { 30 Tò } \\ 27 \end{array}\right.$ |  |
| 03 |  | $\int^{1} \begin{gathered} 2 \\ \text { GO TO } \\ 18 \end{gathered}{ }^{8}$ | $1$ |  |  |  |  | 03 |  | $\begin{array}{ll} 1 & 2 \\ \text { GO TO } & \nabla^{2} \end{array}{ }^{8}$ | $\square$ | $\left\lvert\, \begin{array}{cc} 1 & 2 \\ 30 \text { TO } \\ 27 \end{array}\right.$ |  |
| 04 |  |  | $1$ |  |  | $1$ |  | 04 |  | $\left\lvert\, \begin{array}{cc} \left.\begin{array}{ll} 1 & { }^{2} \\ \text { GO } & { }^{8} \end{array} \right\rvert\, \end{array}\right.$ |  |  |  |
| 05 |  | $\int_{1}^{1} \begin{gathered} 2 \\ \text { GO TO } \\ 18 \end{gathered}{ }^{8}$ | $1$ |  |  | $1$ | $\square$ | 05 |  | $\begin{array}{ccc} 1 & 2 \\ \text { GO TO } & \nabla^{2} \end{array}{ }^{8}$ | $\square$ | $\left\lvert\, \begin{array}{cc} 1 & 2 \\ 30 \\ \text { 30 To } & 27 \end{array}\right.$ |  |
| 06 |  | $\int^{1} \begin{gathered} 2 \\ \text { GO TO } \\ 18 \end{gathered}{ }^{8}$ | $1$ |  |  | $1$ |  | 06 | ( $\begin{array}{rr}1 & 2 \\ \text { GÓtO } \\ \text { TO }\end{array}$ | $\begin{array}{ccc} 1 & 2 & \nabla^{8} \\ \text { GO TO } & 25 \end{array}$ | $\square$ |  |  |
| 07 |  | $\int^{1}{ }^{2}{ }^{2} \nabla^{\boldsymbol{\sigma}}{ }_{18}^{8}$ | $1$ | $\square$ |  | $1$ |  | 07 |  | $\begin{array}{cc} 1 & 2 \\ \text { GO TO } & \nabla^{25} \end{array}$ | $\square$ | $\left\lvert\, \begin{array}{cc} 1 & 2 \\ \text { 30 To } \\ & 27 \end{array}\right.$ |  |
| 08 |  |  | $1$ |  |  | $1$ |  | 08 | ( $\begin{array}{rr}1 & 2 \\ \downarrow \\ \text { GÓTO } & \\ \end{array}$ | $\begin{array}{lll} 1 & 2 & \square^{8} \\ \text { GO TO } & \begin{array}{l} 25 \end{array} \end{array}$ | $\square$ | $12^{2} \tau^{8}$ 30 Tó 27 |  |
| 09 |  |  |  |  |  |  |  | 09 |  |  |  | ${ }^{1} 2^{2} \Phi^{8}$ |  |
| 10 |  | ${ }^{1}{ }^{2}{ }^{2} \nabla^{\boldsymbol{\sigma}}{ }_{18}^{8}$ | $1$ | $\square$ |  | $1$ |  | 10 |  | $\left.\begin{array}{ccc} 1 & 2 & \square^{8} \\ \text { GO TO } & 25 \end{array} \right\rvert\,$ |  |  | $\square$ |

Qs. 16 AND 19
RECORD 'OO' IF PARENT IS NOT LISTED
IN THE HOUSEHOLD SCHEDULE.



| HOUSEHOLD CHARACTERISTICS |  |  |  |
| :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 101 | What is the main source of drinking water for members of your household? |  |  |
| 102 | What is the main source of water used by your household for other purposes such as cooking and handwashing? |  |  |
| 103 | Where is that water source located? | IN OWN YARD/PLOT $\ldots \ldots \ldots \ldots$ 1 <br> ELSEWHERE $\ldots \ldots \ldots .$. $\ldots$ | $\longrightarrow 106$ |
| 104 | How long does it take to go there, get water, and come back? |  | $\longrightarrow 106$ |
| 105 | Who usually goes to this source to fetch the water for your household? | ADULT WOMAN $\ldots \ldots \ldots \ldots \ldots$ 1 <br> ADULT MAN $\ldots \ldots \ldots \ldots \ldots$ 2 <br> FEMALE CHILD  <br> UNDER 15 YEARS OLD $\ldots \ldots \ldots$ 3 <br> MALE CHILD  <br> UNDER 15 YEARS OLD $\ldots \ldots \ldots$ 4 <br> OTHER $\quad$ 6 |  |
| 106 | Do you treat your water in any way to make it safer to drink? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ $\ldots$ <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots$ $\ldots$ <br> DON'T KNOW . . . . . . . . . . . . . . . . . . . . 8 | $\xrightarrow{\longrightarrow} 108$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 107 | What do you usually do to the water to make it safer to drink? <br> Anything else? <br> RECORD ALL MENTIONED. |  |  |
| 108 | What kind of toilet facility do members of your household usually use? |  | $\longrightarrow 111$ |
| 109 | Do you share this toilet facility with other households? |  | $\rightarrow 111$ |
| 110 | How many households use this toilet facility? |  |  |
| 111 | Does your household have: <br> Electricity? <br> A radio? <br> A television? <br> A mobile telephone? <br> A non-mobile telephone? <br> A refrigerator? <br> A stove? <br> A watch or clock? |  |  |
| 112 | What type of fuel does your household mainly use for cooking? |  | $\begin{aligned} & \square \rightarrow 114 \\ & \longrightarrow 116 \end{aligned}$ |
| 113 | In this household, is food usually cooked on a stove or an open fire? <br> PROBE FOR TYPE. | OPEN FIRE OR STOVE <br> WITHOUT CHIMNEY/HOOD ..... 1 OPEN FIRE OR STOVE <br> WITH CHIMNEY/HOOD .......... 2 <br> CLOSED STOVE WITH CHIMNEY ... 3 <br> OTHER $\qquad$ 6 <br> (SPECIFY) |  |
| 114 | Is the cooking usually done in the house, in a separate building, or outdoors? |  | $\rightarrow 116$ |
| 115 | Do you have a separate room which is used as a kitchen? |  |  |




| NO. | QUESTIONS AND FILTERS |  | CODING CATEGORIES |  |
| :---: | :---: | :---: | :---: | :---: |
| 131 | Did anyone sleep under this mosquito net last night? | $$ | $\begin{array}{\|ccc} \text { YES } \ldots \ldots . & 1 \\ \text { NO . . . . . . . } & 2 \\ (\text { SKIP TO 133) } & \stackrel{-}{1} \\ \text { NOT SURE . . } & 8 \end{array}$ | $\begin{array}{ccc} \text { YES } \ldots \ldots . & 1 \\ \text { NO . . . . . . . } & 2 \\ (\text { SKIP TO 133) } & -1 \\ \text { NOT SURE . . } & 8 \end{array}$ |
| 132 | Who slept under this mosquito net last night? <br> RECORD THE RESPECTIVE LINE NUMBER FROM THE HOUSEHOLD SCHEDULE. | NAME $\qquad$LINE.........$~$ <br> NO. <br> NAME $\qquad$LINE.......... <br> NO. <br> NAME $\qquad$ <br> LINE.........  <br> NO.  <br> NAME $\qquad$ <br> LINE <br> NO. $\square$ | NAME $\qquad$LINE <br> NO.......... <br> NAME $\qquad$LINE:........ <br> NO. <br> NAME $\qquad$LINE.........  <br> NO.  <br> NAME $\qquad$ <br> LINE......... <br> NO. $\square$ | NAME $\qquad$ <br> NAME $\qquad$ <br> LINE <br> NO.........$~$ <br> NAME $\qquad$ <br> LINE <br> NO. <br> NAME $\qquad$ <br> LINE <br> NO. $\square$ |
| 133 | How many months ago did your household obtain the mosquito net? <br> IF LESS THAN ONE MONTH, RECORD '00'. IF 37 MONTHS OR MORE, CIRCLE CODE ' 96 '. IF DON'T KNOW, RECORD ' 98 '. | MORE THAN 3 <br> YEARS AGO... 96 <br> DK. $\qquad$ | MORE THAN 3 <br> YEARS AGO... 96 <br> DK. $\qquad$ 98 | MORE THAN 3 <br> YEARS AGO... 96 <br> DK. $\qquad$ 98 |
| 134 | When you got the net, was it treated with an insecticide to kill or repel mosquitos? | YES $\ldots \ldots$. 1 <br> NO $\ldots \ldots \ldots$ 2 <br> NOT SURE ............ 8 | YES $\ldots \ldots$. 1 <br> NO $\ldots \ldots \ldots$ 2 <br> NOT SURE .... 8 | YES $\ldots \ldots$. 1 <br> NO $\ldots \ldots .$. 2 <br> NOT SURE . . . . 8 |
| 135 | Since you got the mosquito net, was it ever soaked or dipped in a liquid to repel mosquitos? | $$ | $\begin{array}{ccc} \text { YES } \ldots \ldots \ldots & 1 \\ \text { NO . . . . . . . . } & 2 \\ \text { (SKIP TO 137) } & \leftarrow \\ \text { NOT SURE . . } & 8 \end{array}$ | $\begin{array}{ccc} \text { YES } \ldots \ldots & 1 \\ \text { NO } \ldots \ldots \ldots & 2 \\ (\text { SKIP TO 137) } & - \\ \text { NOT SURE . . } & 8 \end{array}$ |
| 136 | How many months ago was the net last soaked or dipped? <br> IF LESS THAN ONE MONTH, RECORD '00'. <br> IF 25 MONTHS OR MORE, CIRCLE CODE ' 96 '. <br> IF DON'T KNOW/UNSURE, CIRCLE '98'. | MORE THAN 2 <br> YEARS AGO... 96 <br> NOT SURE/ <br> DK. $\qquad$ | MORE THAN 2 <br> YEARS AGO... 96 <br> NOT SURE/ <br> DK. $\qquad$ | MORE THAN 2 <br> YEARS AGO... 96 <br> NOT SURE/ <br> DK. $\qquad$ |
| 137 |  | GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 138. | GO BACK TO 129 FOR NEXT NET; OR, IF NO MORE NETS, GO TO 138. | GO BACK TO 129 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE NETS, GO TO 138 |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 138 | During the last 12 months, has anyone sprayed the interior walls of your dwelling against mosquitoes? <br> IF NOT SPRAYED, RECORD '95' <br> IF 'YES', How many months ago was the house sprayed? RECORD '00' IF LESS THAN ONE MONTH. | MONTHS AGO <br> NOT SPRAYED $95$ | $\rightarrow 140$ |
| 139 | Who sprayed the house? | GOVERNMENT PROGRAM $\ldots \ldots .$. 1 <br> PRIVATE COMPANY ............ 2 <br> HOUSEHOLD MEMBER .......... 3 <br>   <br> OTHER  <br> DON'T KNOW .................... 8 |  |
| 140 | Would you like to have a (another) mosquito net? |  | $\longrightarrow 142$ |
| 141 | What colour of mosquito or bed net would you prefer? |  |  |
| 142 | ASK RESPONDENT FOR A TEASPOONFUL OF SALT. TEST SALT FOR IODINE. <br> RECORD PPM (PARTS PER MILLION) |  |  |

## SUPPORT FOR SICK PEOPLE



| NO. | FILTERS | 1ST SICK PERSON <br> NAME $\qquad$ | 2ND SICK PERSON <br> NAME $\qquad$ | 3RD SICK PERSON <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 213 | In the last 30 days, has (NAME) had severe pain, mild pain, or no pain at all? | SEVERE . . . . 1 <br> MILD . . . . . 2 <br> NOT AT ALL . . 3 <br> (SKIP TO 215)  | SEVERE $\ldots .$. 1 <br> MILD . . . . . 2 <br> NOT AT ALL . . 3 <br> (SKIP TO 215)  | SEVERE . . . . . 1 <br> MILD . . . . . 2 <br> NOT AT ALL . . 3 <br> (SKIP TO 215)  |
| 214 | When (NAME) was in pain, was he/she able to reduce or stop the pain most of the time, some of the time, or not at all? | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL. . . } & 3 \end{array}$ | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ |
| 215 | In the last 30 days, did (NAME) suffer from nausea, coughing, diarrhea, or constipation? <br> IF YES: <br> Did (NAME) suffer severely or mildly? | SEVERE . . . . 1 <br> MILD . . . . . . 2 <br> NOT AT ALL . . 3 <br> (SKIP TO 217)  | SEVERE . . . . 1 <br> MILD . . . . . . 2 <br> NOT AT ALL. . 3 <br> (SKIP TO 217)  | SEVERE $\ldots \ldots$ 1 <br> MILD . . . . . . 2 <br> NOT AT ALL . . 3 <br> (SKIP TO 217$)$  |
| 216 | Was (NAME) able to reduce or stop the (nausea/coughing/diarrhea/constipation) most of the time, some of the time or not at all? | $\begin{array}{ll} \text { MOST TIME . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL. . . } & 3 \end{array}$ | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ |
| 217 |  | GO BACK TO 205 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE ADDITIONAL QUESTIONNAIRE(S); IF NO MORE SICK PEOPLE, GO TO 301. |  |  |



|  |  | NAME 1ST DEATH | NAME 2ND DEATH | NAME 3RD DEATH |
| :---: | :---: | :---: | :---: | :---: |
| 316 | In the last 12 months, did your household receive any social support for (NAME), such as help in household work, training for a caregiver, or legal services, for which you did not have to pay? | YES $\ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots$ 2 <br> (SKIP TO 318 ) -1 <br> DK $\ldots \ldots . .$. 8 |  | $\begin{aligned} & \text { YES } \ldots \ldots \ldots . \\ & \begin{array}{c} 1 \\ \text { NO } \ldots \ldots \ldots \end{array} \\ & \text { (SKIP TO } 318) \\ & \text { DK } \ldots \ldots \ldots . \\ & \hline \end{aligned}$ |
| 317 | Did your household receive any social support in the las 30 days before (NAME)'s death? | YES $\ldots \ldots . . .$. 1  <br> NO $\ldots . . .$. 2 <br> DK $\ldots . . . .$. 8 | YES $\ldots \ldots . . .$. 1  <br> NO $\ldots \ldots .$. 2  <br> DK $\ldots . . . . .$. 8 | $\begin{array}{lll} \text { YES } \ldots \ldots \ldots & 1 \\ \text { NO } \ldots \ldots \ldots & \ldots \\ \text { DK } \ldots \ldots \ldots & 8 \end{array}$ |
| 318 | In the 30 days before (NAME) died, did he/she have severe pain, mild pain, or no pain at all? | SEVERE ..... 1 <br> MILD ...... 2 <br> NOT AT ALL . . 3 <br> (SKIP TO 320 )  | SEVERE ..... 1 <br> MILD ...... 2 <br> NOT AT ALL . . 3 <br> (SKIP TO 320)  | SEVERE . . . . 1 <br> MILD . . . . . . 2 <br> NOT AT ALL . 3 <br> (SKIP TO 320)  |
| 319 | When (NAME) was in pain, was he/she able to reduce or stop the pain most of the time, some of the time, or not at all? | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ |
| 320 | In the 30 days before (NAME) died, did he/she suffer from nausea, coughing, diarrhea, or constipation? <br> IF YES: <br> Did (NAME) suffer severely or mildly? | SEVERE ..... 1 <br> MILD ...... 2 <br> NOT AT ALL.. 3 <br> (SKIP TO 322)  | SEVERE . . . . 1 <br> MILD . . . . . 2 <br> NOT AT ALL . 3 <br> (SKIP TO 322)  | SEVERE . . . . 1 <br> MILD . . . . . . 2 <br> NOT AT ALL . . 3 <br> (SKIP TO 322) l |
| 321 | Was (NAME) able to reduce or stop the (nausea/coughing/diarrhea/constipation) most of the time, some of the time or not at all? | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ | $\begin{array}{ll} \text { MOST TIME . . . } & 1 \\ \text { SOME TIME . . } & 2 \\ \text { NOT AT ALL . . } & 3 \end{array}$ |
| 322 |  | GO BACK TO 304 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE ADDITIONAL QUESTIONNAIRE(S); IF NO MORE PEOPLE HAVE DIED, GO TO 401. |  |  |

## SUPPORT FOR ORPHANS AND VULNERABLE CHILDREN

| NO. | FILTERS | SKIP |
| :---: | :---: | :---: |
| 401 | CHECK COLUMN 7 IN THE HOUSEHOLD SCHEDULE: ANY CHILD AGE 0-17? <br> AT LEAST ONE NO CHILD $\square$ | END <br> INTERVIEW |
| 402 | CHECK COLUMN 14 IN THE HOUSEHOLD SCHEDULE: ANY ADULT AGE 18-59 WHO IS SICK? |  |
| 403 | CHECK 306 IN THE PREVIOUS SECTION: ANY ADULT AGE 18-59 WHO DIED IN PAST 12 MONTHS? |  |
| 404 | $\begin{array}{rrr\|r\|} \hline \text { CHECK COLUMN } 21 \text { IN THE HOUSEHOLD SCHEDULE: ANY CHILD WHOSE MOTHER AND/OR FATHER HAS DIED } \\ \text { OR WHOSE MOTHER AND/OR FATHER IS NOT LIVING IN } \\ \text { THE HOUSEHOLD AND/OR IS SICK? } \end{array}$ | END INTERVIEW |


| 405 | RECORD NAMES, LINE NUMBERS AND AGES OF CHILDREN AGE 0-17 AS APPROPRIATE, BEGINNING WITH THE FIRST CHILD AND CONTINUING IN THE ORDER IN WHICH THEY ARE LISTED IN THE HOUSEHOLD SCHEDULE OR IN 21, AS APPROPRIATE. IF THERE ARE MORE THAN 8 CHILDREN TO BE LISTED, USE ADDITIONAL QUESTIONNAIRE(S). |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 406 | NAME <br> LINE NUMBER <br> AGE | 1ST CHILD <br> NAME $\qquad$ <br> LINE NUMBER <br> AGE | 2ND CHILD <br> NAME $\qquad$ <br> LINE <br> NUMBER $\square$ <br> AGE | 3RD CHILD <br> NAME $\qquad$ <br> LINE <br> NUMBER $\square$ <br> AGE $\square$ | 4TH CHILD <br> NAME $\qquad$ <br> LINE <br> NUMBER $\square$ <br> AGE |
| 407 | I would like to ask you about any formal, organized help or support that your household may have received fo (NAME OF EACH CHILD IN 406) and for which you did not have to pay. By formal, organized support I mean help provided by someone working for a program. This program could be government, private, religious, charity, or community based |  |  |  |  |
| 408 | Now I would like to ask you about the support your household received for (NAME). <br> In the last 12 months, has your household received any medical support for (NAME), such as medical care, supplies or medicine, for which you did not have to pay? | YES $\ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots .$. 8 | YES $\ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots .$. 8 | $\begin{array}{ll} \text { YES } \ldots \ldots \ldots & 1 \\ \text { NO } \ldots \ldots \ldots & 2 \\ \text { DK } \ldots \ldots \ldots & 8 \end{array}$ | YES $\ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots \ldots$ ${ }^{2}$ |
| 409 | In the last 12 months, has your household received any emotiona or psychological support for (NAME), such as companionship, counseling from a trained counselor, or spiritual support, which you received at home and for which you did not have to pay? | YES ......... 1 <br> NO ......... 2 <br> (SKIP TO 411) -1 <br> DK ......... 8 | YES . . . . . . . 1 <br> NO . . . . . 2 <br> (SKIP TO 411) -1 <br> DK . . . . . . . 8 | YES . . . . . . . . 1 <br> NO . . . . . 2 <br> (SKIP TO 411) $-H_{1}$ <br> DK . . . . . . . 8 | YES . . . . . . . 1 <br> NO . . . . . 2 <br> (SKIP TO 411) -1 <br> DK . . . . . . . 8 |
| 410 | Did your household receive any emotional or psychological support in the past three months? | YES $\ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots \ldots$ 8 | $\begin{array}{ll}\text { YES } \ldots \ldots \ldots . & 1 \\ \text { NO } & \ldots \ldots \ldots \\ \text { DK } & \ldots \ldots \ldots . \\ \end{array}$ | $\begin{array}{ll}\text { YES } \ldots \ldots \ldots . & 1 \\ \text { NO } \ldots \ldots \ldots & 2 \\ \text { DK } & \ldots \ldots \ldots . \\ \end{array}$ | $\begin{array}{lll}\text { YES } & \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots & 2 \\ \text { DK } & \ldots \ldots \ldots . & 8\end{array}$ |
| 411 | In the last 12 months, has your household received any materia support for (NAME), such as clothing, food, or financial support, for which you did not have to pay? | YES . . . . . . . 1 <br> NO . . . . . . 2 <br> (SKIP TO 413) -1 <br> DK . . . . . . . 8 | YES . . . . . . . . 1 <br> NO . . . . . 2 <br> (SKIP TO 413) -1 <br> DK . . . . . . . 8 | YES . . . . . . . . 1 <br> NO . . . . . 2 <br> (SKIP TO 413) $-H_{1}$ <br> DK . . . . . . . 8 | YES . . . . . . . . 1 <br> NO . . . . . 2 <br> (SKIP TO 413) -1 <br> DK . . . . . . . 8 |
| 412 | Did your household receive any material support in the past three months? |    <br> YES $\ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots \ldots$ 8 | $\begin{array}{ll} \\ \text { YES } & \ldots \ldots \ldots \\ \text { NO } & \ldots \ldots \ldots \\ \text { DK } & \\ & \ldots \ldots \ldots\end{array}$ | $\begin{array}{ll} \\ \text { YES } & \ldots \ldots \ldots \\ \text { NO } & \ldots \ldots \ldots \\ \text { DK } & \\ & 1 \\ & \ldots \ldots \ldots\end{array}$ | $\begin{array}{lll}\text { YES } & \ldots \ldots \ldots & \ldots \\ \text { NO } & \ldots \ldots \ldots & 1 \\ \text { DK } & \ldots \ldots \ldots & 2 \\ \end{array}$ |
| 413 | In the last 12 months, has your household received any social suppor for (NAME) such as help in household work, training for a caregiver, ol legal services for which you dic not have to pay? | YES . . . . . . . . 1 <br> NO . . . . . 2 <br> (SKIP TO 415) -1 <br> DK . . . . . . . 8 | YES . . . . . . . . 1 <br> NO ....... 2 <br> (SKIP TO 415) -1 <br> DK . . . . . . . 8 | YES . . . . . . . 1 <br> NO . . . . . 2 <br> (SKIP TO 415)  <br> DK . . . . . . 8 | YES . . . . . . . . 1 <br> NO . . . . . 2 <br> (SKIP TO 415) -1 <br> DK . . . . . . . 8 |
| 414 | Did your household receive any social support in the past three months? | YES $\ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots \ldots$. 8 |    <br> YES $\ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots \ldots$ 8 |    <br> YES $\ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots$ 2 <br> DK $\ldots \ldots \ldots$ 8 |    <br> YES $\ldots \ldots \ldots$ 1 <br> NO $\ldots$ $\ldots$ <br> DK $\ldots \ldots \ldots$ 2 <br>    |
| 415 | CHECK 406: AGE OF CHILD | AGE 0-4 $\square$ <br> (SKIP TO 417) <br> AGE 5-17 $\square$ | AGE 0-4 $\square$ $\square$ (SKIP TO 417) <br> AGE 5-17 $\square$ | AGE 0-4 $\square$ <br> (SKIP TO 417) <br> AGE 5-17 $\square$ | AGE 0-4 $\square$ 근 (SKIP TO 417) <br> AGE 5-17 $\square$ |
| 416 | In the last 12 months, has your household received any support for (NAME'S) schooling, such as allowance, free admission, books or supplies, for which you did not have to pay? | YES $\ldots \ldots \ldots$. 1 <br> NO $\ldots \ldots .$. 2 <br> DK $\ldots \ldots . .$. 8 | YES $\ldots \ldots \ldots$. 1 <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots \ldots$. 8 | YES $\ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots \ldots$. 8 | YES $\ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots$ 2 <br> DK $\ldots \ldots \ldots$. 8 |
| 417 | GO BACK TO 406 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE ADDITIONAL QUESTIONNAIRE(S); OR, IF NO MORE CHILDREN, END INTERVIEW. |  |  |  |  |




| 519 | A FINAL OUTCOME OF THE ANAEMIA TEST PROCEDURE MUST BE RECORDED IN 513 AND FOR THE HIV TEST PROCEDURE IN 518 FOR EACH ELIGIBLE CHILD EVEN IF THE CHILD WAS NOT PRESENT, REFUSED, OR COULD NOT BE TESTED FOR SOME OTHER REASON. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 502 | LINE NUMBER <br> (COLUMNS 1 AND 12) <br> NAME <br> (COLUMN 2) <br> AGE <br> (COLUMN 7) | LINE <br> NUMBER <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ | LINE NUMBER $\square$ <br> NAME $\qquad$ AGE IN YEARS $\qquad$ $\square$ | LINE NUMBER <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ |
| 520 | READ CONSENT STATEMENT FOR ADDITIONAL TEST ASK CONSENT FROM PARENT/OTHER ADULT RESPONSIBLE CHILD. CIRCLE CODE AND SIGN. |  |  |  |
| 521 | ADDITIONAL TESTS | CHECK 520: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 520: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 520: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. |
| 522 |  | GO BACK TO 503 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE ADDITIONAL QUESTIONNAIRE(S); IF NO MORE CHILDREN, GO TO 523. |  |  |
| CONSENT STATEMENT FOR STORAGE OF SAMPLE <br> We ask you to allow the Central Statistical Office to store part of the blood sample at the laboratory to be used for testing or research in the future. We are not certain about what tests might be done <br> The blood sample will not have any name or other data attached that could identify (NAME OF CHILD(REN)). You do not have to agree. Will you allow us to keep the blood sample stored for later testing or research! |  |  |  |  |


|  |  | CHILD 4 | CHILD 5 | CHILD 6 |
| :---: | :---: | :---: | :---: | :---: |
| 502 | LINE NUMBER <br> (COLUMNS 1 AND 12) <br> NAME <br> (COLUMN 2) <br> AGE <br> (COLUMN 7) | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ $\square$ | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ $\square$ | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ $\square$ |
| 503 | What is (NAME'S) birth date? <br> IF MOTHER INTER- <br> VIEWED, COPY <br> MONTH AND YEAR <br> FROM BIRTH <br> HISTORY AND ASK <br> DAY; IF MOTHER <br> NOT INTERVIEWED, <br> ASK DAY, MONTH <br> AND YEAR. |  |  |  |
| 504 | CHECK 502 AND 503: CHILD AGE 0-5 OR BORN IN JANUARY 2001 OR LATER? |  | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ $($ GO TO 509$)$ | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ NO . . . . . . . . . . . . . (GO TO 509) |
| 505 | WEIGHT <br> IN KILOGRAMS | KG. ...... <br>  | KG. .... $\quad \square$ | KG. .... $\square \square \square$ |
| 506 | HEIGHT <br> IN CENTIMETRES | CM. $\square$ $\square$ | CM. $\square$ $\square$ | CM. $\square$ $\square$ |
| 507 | MEASURED LYING DOWN OR STANDING UP? | LYING DOWN | LYING DOWN | LYING DOWN |
| 508 | RESULT OF WEIGHT AND HEIGHT MEASUREMENT |  |  |  |
| 509 | AGE: CHECK 503 IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS? |  |  |  |
| 509A | CHECK COVER AND AGE: |  |  |  |
| 510 | LINE NUMBER OF PARENT/OTHER ADULT <br> RESPONSIBLE <br> FOR THE CHILD. <br> RECORD '00' <br> if NOT LISTED. | LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT | LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT | LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT |
| 511 | READ ANAEMIA TEST CONSENT STATEMENT TO PARENT/OTHER ADULT RESPONSIBLE FOR CHILD. CIRCLE CODE AND SIGN. | (IF REFUSED, CIRCLE '3' IN 513) | (IF REFUSED, CIRCLE '3' IN 513) | (IF REFUSED, CIRCLE '3' IN 513) |


|  |  | CHILD 4 |  | CHILD 5 |  | CHILD 6 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 502 | LINE NUMBER <br> (COLUMNS 1 AND 12) <br> NAME <br> (COLUMN 2) | LINE NUMBER <br> NAME $\qquad$ |  | LINE NUMBER <br> NAME $\qquad$ |  | LINE NUMBER <br> NAME $\qquad$ |  |

## CONSENT STATEMENT FOR ANAEMIA

As part of this survey, we are asking people all over the country to take an anaemia test. Anaemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anaemia.
We request that all children age 6 months to 17 years participate in the anaemia testing part of this survey and give a few drops of blood from a finger. The equipment used in taking the blood is clean and completely safe. It has never been used before and will bt thrown away after each test.
The blood will be tested for anaemia immediately, and the result told to you right away. The result will be kept confidentia
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide
Will you allow (NAME(S) OF CHILD(REN) to participate in the anaemia test?

| 512 | RECORD HAEMOGLOBIN LEVEL HERE AND IN ANAEMIA PAMPHLET. | G/DL | G/DL $\square$ | G/DL |
| :---: | :---: | :---: | :---: | :---: |
| 513 | RECORD RESULT CODE OF HAEMOGLOBIN MEASUREMENT. |  |  |  |
| 514 | CHECK COVER AND AGE OR MONTH AND YEAR OF BIRTH: | HOUSEHOLD SELECTED FOR YOUTH <br> 0-1 YEAR OR BORN IN JULY 2004 OR LATER ................... 1 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE, GO TO 523) <br> 2-11 YEARS OR BORN BEFORE JULY 2004 ................... 2 <br> HOUSEHOLD NOT SELECTED FOR YOUTH $\qquad$ (GO TO 503 FOR NEXT CHILD OR, IF NO | HOUSEHOLD SELECTED FOR YOUTH <br> 0-1 YEAR OR BORN IN JULY 2004 OR LATER ................... . 1 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE, GO TO 523) <br> 2-11 YEARS OR BORN BEFORE JULY 2004 ................... 2 <br> household not selected FOR YOUTH $\qquad$ (GO TO 503 FOR NEXT CHILD OR, IF NO | HOUSEHOLD SELECTED FOR YOUTH <br> 0-1 YEAR OR BORN IN JULY 2004 OR LATER ................... . 1 (GO TO 503 FOR NEXT CHILD OR, IF NO MORE, GO TO 523) <br> 2-11 YEARS OR BORN BEFORE JULY 2004 ................... 2 <br> HOUSEHOLD NOT SELECTED FOR YOUTH $\qquad$ (GO TO 503 FOR NEXT CHILD OR, IF NO |
| 516 | READ HIV <br> TEST CONSENT STATEMENT TO PARENT/OTHER ADULT RESPONSIBLE FOR CHILD. CIRCLE CODE AND SIGN. | (IF REFUSED, CIRCLE '3' IN 518) | (IF REFUSED, CIRCLE '3' IN 518) | (IF REFUSED, CIRCLE '3' IN 518) |

CONSENT STATEMENT FOR HIV TEST
As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very seriou: illness. The HIV test is being done to see how big the AIDS problem is in Swaziland
For the HIV test, we need a few more drops of blood from a finger. Again the equipment used in taking the blood is clean and completely safe It has never been used before and will be thrown away after each test
No names will be attached so we will not be able to tell you the test results. No one else will be able to know the test results either
If you want to know whether your child have HIV, I can provide you with a list of nearby facilities offering counseling and testing for HIV I will also give you a voucher for free services for your child (REN) that you can use at any of these facilities.
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide
Will you (allow NAME OF CHILD(REN) to take the HIV test?

| 517 | BAR CODE LABEL | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE 2ND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE 3RD ON THE TRANSMITTAL FORM. |
| :---: | :---: | :---: | :---: | :---: |
| 518 | OUTCOME OF <br> HIV TEST <br> PROCEDURE | BLOOD TAKEN ................. 1 NOT PRESENT ................ 2 REFUSED ................... 3 OTHER ...................... 6 | BLOOD TAKEN ................. 1 NOT PRESENT ................ 2 REFUSED ................... 3 OTHER ...................... 6 | BLOOD TAKEN ................. 1 NOT PRESENT ................ 2 REFUSED ................... 3 OTHER ...................... 6 |



WEIGHT, HEIGHT, HAEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 12 AND OLDER


## CONSENT STATEMENT FOR ANAEMIA TEST FROM GIRLS AGE 12-14

We are asking children like you to take a blood test. The test is for a problem in the blood that can happen when a person does not eat well or has been sick. This will help the government to plan programs to prevent and treat this problem in children.

We would like you to take the test. You will have to give a few drops of blood from a finger. The needle we use is clean and safe. It has not been used before and we will throw it away after we use it with you.

We will do the blood test right away and tell you the results. No one will be told the results.
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide
Do you want to be tested for this blood problem?

|  |  | WOMAN 1 | WOMAN 2 | WOMAN 3 |
| :---: | :---: | :---: | :---: | :---: |
| 524 | LINE NUMBER (COLUMN 9) NAME (COLUMN 2) AGE (COLUMN 7) | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ | LINE NUMBER $\square$ <br> NAME $\qquad$ AGE IN YEARS $\square$ | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\square$ |
| 532 | CHECK 524: AGE | $\begin{array}{lll} \begin{array}{l} \text { 12-14 YEARS } \\ 15+ \\ 15 \\ \text { YEARS } \end{array} \ldots \ldots & 1 \longrightarrow 534 & 2 \end{array}$ | $\begin{aligned} & \text { 12-14 YEARS } \ldots \ldots . \quad 1 \longrightarrow 534 \\ & 15-17 \text { YEARS } \ldots \ldots . \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { 12-14 YEARS } \ldots \ldots . \quad 1 \longrightarrow 534 \\ & 15-17 \text { YEARS } \ldots \ldots . \\ & \hline \end{aligned}$ |
| 533 | PREGNANCY <br> STATUS: CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: <br> Are you pregnant? |  |  |  |
| 534 | READ THE HIV <br> TEST CONSENT STATEMENT. FOR GIRLS AGE 12-14 AND NEVER-IN UNION WOMEN AGE 15-17, ASK CONSENT FROM PARENT/OTHER ADULT IDENTIFIED IN 530 BEFORE ASKING RESPONDENT'S CONSENT. |  |  |  |
| 535 | RECORD HAEMO- <br> GLOBIN LEVEL <br> HERE AND IN <br> ANAEMIA <br> PAMPHLET. | G/DL $\square$ $\square$ | G/DL $\square$ $\square$ | G/DL $\square$ $\square$ |
| 536 | RECORD RESULT CODE OF HAEMOGLOBIN MEASUREMENT. | MEASURED ................... 1 NOT PRESENT ................ 2 REFUSED ................... 3 OTHER ....................... 6 |  |  |

## CONSENT STATEMENT FOR HIV TEST FROM WOMEN AGE 15 AND OLDER

READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 534 IF RESPONDENT CONSENTS TO THE HIV TEST AND CODE '3' IF SHE REFUSES.
FOR GIRLS AGE 12-14 AND NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 530) BEFORE ASKING THE ADOLESCENT FOR HER CONSENT. CIRCLE CODE '2' IN 534 IF THE PARENT (OTHER ADULT) REFUSES. CONDUCT THE TEST ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT.
As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very seriou: illness. The HIV test is being done to see how big the AIDS problem is in Swaziland
For the HIV test, we need a few more drops of blood from a finger. Again the equipment used in taking the blood is clean and completely safe It has never been used before and will be thrown away after each test
No names will be attached to the blood sample which will keep the results completely anonymous. For this reason, we will not be able to know (your/NAMl OF ADOLESCENT) test results, and so we will not be able to tell you the test results either.
If you want to know whether you (your child) have HIV, I can provide you with a list of nearby facilities offering counseling and testing for HIV I will also give you a voucher that you can use at any of these facilities.
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide
Will you (allow NAME OF ADOLESCENT to) take the HIV test?

## CONSENT STATEMENT FOR HIV TEST FROM GIRLS AGE 12-14

We are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very serious illness. We are doing the HIV test to see how big the AIDS problem is in Swaziland
We would like you to take the test. You will have to give a few drops of blood from a finger. The needle we use is clean and completely safe It has not been used before and we will throw it away after we use it with you
We will not write your name on the blood sample. No one will know that it is your blood. We will not be able to give you the test results
If you want to know if you have HIV, I can provide you the names of places that can help you.
I will also give you a note for free testing that you can use at any of these places
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide
Do you want to be tested for HIV?

|  |  | WOMAN 1 | WOMAN 2 | WOMAN 3 |
| :---: | :---: | :---: | :---: | :---: |
| 524 | LINE NUMBER (COLUMN 9) NAME (COLUMN 2) AGE (COLUMN 7) | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ | LINE NUMBER $\square$ <br> NAME $\qquad$ AGE IN YEARS |
| 537 | BAR CODE LABEL | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. |
| 538 | OUTCOME OF <br> HIV TEST <br> PROCEDURE |  |  |  |
| 539 | A FINAL OUTCOME FOR THE ANAEMIA TEST PROCEDURE MUST BE RECORDED IN 536 AND FOR THE HIV TEST PROCEDURE IN 538 FOR EACH ELIGIBLE WOMAN EVEN IF SHE WAS NOT PRESENT, REFUSED, OR COULD NOT BE TESTED FOR SOME OTHER REASON. |  |  |  |
| 540 | CHECK 538: OUTCOME OF HIV TEST |  |  |  |
| 541 | READ THE CONSENT STATEMENT FOR ADDITIONAL TESTS. FOR GIRLS AGE 12-14 AND NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM PARENT/ OTHER ADULT IDENTIFIED IN 530 BEFORE ASKING RESPONDENT'S CONSENT. |  |  |  |
| 542 | ADDITIONAL TESTS | CHECK 541: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 541: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 541: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. |
| CONSENT STATEMENT FOR STORAGE OF SAMPLE FROM WOMEN AGE 15 AND OLDER <br> READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE ' 1 ' IN 541 IF RESPONDENT CONSENTS TO THE ADDITIONAL TESTS AND CODE '3' IF SHE REFUSES. <br> FOR GIRLS AGE 12-14 AND NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 530) BEFORE ASKING THE ADOLESCENT FOR HER CONSENT. CIRCLE CODE '2' IN 541 IF THE PARENT (OTHER ADULT) REFUSES. CIRCLE CODE '1' IN 539 IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT. <br> We ask you to allow the Central Statistical Office to store part of the blood sample at the laboratory to be used for testing or research in the future. We are not certain about what tests might be done <br> The blood sample will not have any name or other data attached that could identify (you/NAME OF ADOLESCENT). You do not have to agree. Will you allow us to keep the blood sample stored for later testing or research! |  |  |  |  |
| CONSENT STATEMENT FOR STORAGE OF SAMPLE FROM GIRLS AGE 12-14 <br> We ask you to allow the Central Statistical Office to store part of the blood sample at the laboratory to be used for testing or research in the future. We are not certain about what tests might be done <br> The blood sample will not have any name or other data attached that could identify you. You do not have to agree. Will you allow us to keep the blood sample stored for later testing or research! |  |  |  |  |

WEIGHT, HEIGHT, HAEMOGLOBIN MEASUREMENT AND HIV TESTING FOR WOMEN AGE 12 AND OLDER

|  |  | WOMAN 4 | WOMAN 5 | WOMAN 6 |
| :---: | :---: | :---: | :---: | :---: |
| 524 | LINE NUMBER <br> (COLUMNS 9 AND 11) <br> NAME <br> (COLUMN 2) <br> AGE <br> (COLUMN 7) | LINE <br> NUMBER $\square$ <br> NAME <br> AGE IN YEARS $\qquad$ | LINE <br> NUMBER $\square$ <br> NAME <br> AGE IN YEARS $\qquad$ | LINE <br> NUMBER $\square$ <br> NAME <br> AGE IN YEARS $\qquad$ |
| 525 | WEIGHT <br> IN KILOGRAMS | KG. | KG. ....  | KG. ....   |
| 526 | HEIGHT <br> IN CENTIMETRES | СМ. .....  | CM. ....  | CM. ....  |
| 527 | RESULT OF WEIGHT AND HEIGHT MEASUREMENT | MEASURED $\ldots \ldots \ldots \ldots \ldots .$. 1 <br> NOT PRESENT $\ldots \ldots \ldots \ldots \ldots$ 2 <br> REFUSED $\ldots \ldots \ldots \ldots \ldots .$. 3 <br> OTHER $\ldots \ldots \ldots \ldots \ldots \ldots .$. 6 |  |  |
| 528 | CHECK 524: AGE | $12-14$ YEARS$\ldots \ldots$. $1 \longrightarrow 530$  <br> $15-17$ YEARS $\ldots .$. 2 <br> $18+$ YEARS $\ldots . .$. $3 \longrightarrow 531$ | 12-14 YEARS $\ldots \ldots$. $1 \longrightarrow 530$ <br> $15-17$ YEARS <br>  <br> $18+$ YEARS $\ldots . .$. $2 \longrightarrow 531$ |  |
| 529 | CHECK COLUMN 8: MARITAL STATUS |  | CODE 4 (NEVER IN UNION $\ldots \ldots$ OTHER $\ldots \ldots \ldots \ldots \ldots \ldots$ (GO TO 531) |  |
| 530 | RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED. | LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT | LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT | LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT |
| 531 | READ ANAEMIA TEST CONSENT STATEMENT. FOR GIRLS AGE 12-14 AND NEVER-INUNION WOMEN AGE 15-17, ASK CONSENT FROM PARENT/OTHER ADULT IDENTIFIED IN 530 BEFORE ASKING RESPONDENT'S CONSENT. |  |  |  |

## CONSENT STATEMENT FOR ANAEMIA TEST FROM WOMEN AGE 15 AND OLDER

READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 531 IF RESPONDENT CONSENTS TO THE ANAEMIA TEST AND CODE '3' IF SHE REFUSES.
FOR GIRLS AGE 12-14 AND NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS
RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 530) BEFORE ASKING THE ADOLESCENT FOR HER CONSENT. CIRCLE CODE '2' IN 531 IF THE PARENT (OTHER ADULT) REFUSES. CONDUCT THE TEST ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT
As part of this survey, we are asking people all over the country to take an anaemia test. Anaemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anaemia.
We request that you participate in the anaemia testing part of this survey and give a few drops of blood from a finger. The equipment used in taking the blood is clean and completely safe. It has never been used before and will be thrown away after each test.

The blood will be tested for anaemia immediately, and the result told to you right away. The result will be kept confidential.
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide.
Will you (allow NAME OF ADOLESCENT to) take the anaemia test?


|  |  | WOMAN 4 | WOMAN 5 | WOMAN 6 |
| :---: | :---: | :---: | :---: | :---: |
| 524 | LINE NUMBER (COLUMN 9) NAME (COLUMN 2) AGE (COLUMN 7) | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ | LINE NUMBER $\square$ <br> NAME <br> AGE IN YEARS $\qquad$ |
| 537 | BAR CODE LABEL | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. |
| 538 | OUTCOME OF HIV TEST PROCEDURE | BLOOD TAKEN $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NOT PRESENT $\ldots \ldots \ldots \ldots \ldots$ 2 <br> REFUSED $\quad \ldots \ldots \ldots \ldots \ldots$ 3  <br> OTHER $\quad \ldots \ldots \ldots \ldots \ldots \ldots .$. 6  | BLOOD TAKEN $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NOT PRESENT $\ldots \ldots \ldots \ldots \ldots$ 2 <br> REFUSED $\ldots \ldots \ldots \ldots \ldots \ldots$ 3  <br> OTHER $\ldots \ldots \ldots \ldots \ldots \ldots$ 6  | BLOOD TAKEN $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NOT PRESENT $\ldots \ldots \ldots \ldots \ldots$ 2 <br> REFUSED $\quad \ldots \ldots \ldots \ldots \ldots \ldots$ 3  <br> OTHER $\ldots \ldots \ldots \ldots \ldots \ldots$ 6  |
| 539 | A FINAL OUTCOME FOR THE ANAEMIA TEST PROCEDURE MUST BE RECORDED IN 536 AND FOR THE HIV TEST PROCEDURE IN 538 FOR EACH ELIGIBLE WOMAN EVEN IF SHE WAS NOT PRESENT, REFUSED, OR COULD NOT BE TESTED FOR SOME OTHER REASON. |  |  |  |
| 540 | CHECK 538: OUTCOME OF HIV TEST |  |  |  |
| 541 | READ THE CONSENT STATEMENT FOR ADDITIONAL TESTS. FOR GIRLS AGE 12-14 AND NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM PARENT/ OTHER ADULT IDENTIFIED IN 530 BEFORE ASKING RESPONDENT'S CONSENT. |  |  | GRANTED $\ldots \ldots \ldots \ldots \ldots$. <br> PARENT/OTHER RESPONSIBLE <br> ADULT REFUSED $\ldots \ldots \ldots \ldots$ <br> RESPONDENT <br> REFUSED $\ldots \ldots \ldots \ldots \ldots \ldots$ <br>  <br> (SIGN) |
| 542 | ADDITIONAL TESTS | CHECK 541: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 541: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 541: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. |
| CONSENT STATEMENT FOR STORAGE OF SAMPLE FROM WOMEN AGE 15 AND OLDER <br> READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE ' 1 ' IN 541 IF RESPONDENT CONSENTS TO THE ADDITIONAL TESTS AND CODE '3' IF SHE REFUSES. <br> FOR GIRLS AGE 12-14 AND NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 530) BEFORE ASKING THE ADOLESCENT FOR HER CONSENT. CIRCLE CODE '2' IN 541 IF THE PARENT (OTHER ADULT) REFUSES. CIRCLE CODE '1' IN 539 IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT. <br> We ask you to allow the Central Statistical Office to store part of the blood sample at the laboratory to be used for testing or research in the future. We are not certain about what tests might be done. <br> The blood sample will not have any name or other data attached that could identify (you/NAME OF ADOLESCENT). You do not have to agree. Will you allow us to keep the blood sample stored for later testing or research? |  |  |  |  |
| CONSENT STATEMENT FOR STORAGE OF SAMPLE FROM GIRLS AGE 12-14 <br> We ask you to allow the Central Statistical Office to store part of the blood sample at the laboratory to be used for testing or research in the future. We are not certain about what tests might be done. <br> The blood sample will not have any name or other data attached that could identify you. You do not have to agree. Will you allow us to keep the blood sample stored for later testing or research? |  |  |  |  |

WEIGHT, HEIGHT, HAEMOGLOBIN MEASUREMENT AND HIV TESTING FOR MEN AGE 12 AND OLDER


We are asking children like you to take a blood test. The test is for a problem in the blood that can happen when a person does not eat well or has been sick. This will help the government to plan programs to prevent and treat this problem in children.
We would like you to take the test. You will have to give a few drops of blood from a finger. The needle we use is clean and safe. It has not been used before and we will throw it away after we use it with you.
We will do the blood test right away and tell you the results. No one will be told the results.
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide
Do you want to be tested for this blood problem?

|  |  | MAN 1 | MAN 2 | MAN 3 |
| :---: | :---: | :---: | :---: | :---: |
| 544 | LINE NUMBER <br> (COLUMNS 10 AND 11) <br> NAME <br> (COLUMN 2) <br> AGE <br> (COLUMN 7) | LINE NUMBER $\square$ <br> NAME $\qquad$ AGE IN YEARS $\square$ | LINE NUMBER $\square$ <br> NAME $\qquad$ AGE IN YEARS $\square$ | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\square$ |
| 552 | READ THE HIV <br> TEST CONSENT STATEMENT. FOR BOYS AGE 12-14 AND NEVER-IN UNION MEN AGE 15-17, ASK CONSENT FROM PARENT/OTHER ADULT IDENTIFIED IN 550 BEFORE ASKING RESPONDENT'S CONSENT. |  |  |  |
| 553 | RECORD HAEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET. | G/DL $\ldots \ldots \ldots . \square \square$ | G/DL $\ldots \ldots . .$$\square$ <br> $\square$ | G/DL $\square$ $\square$ |
| 554 | RECORD RESULT CODE OF HAEMOGLOBIN MEASUREMENT. |  |  |  |
| 555 | BAR CODE LABEL | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. |
| 556 | OUTCOME OF <br> HIV TEST <br> PROCEDURE |  | BLOOD TAKEN ................. 1 NOT PRESENT ................ 2 REFUSED .................... 3 OTHER ...................... 6 |  |

CONSENT STATEMENT FOR HIV TEST FROM MEN AGE 15 AND OLDER
READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 552 IF RESPONDENT CONSENTS TO THE HIV TEST AND CODE '3' IF HE REFUSES.

FOR BOYS AGE 12-14 AND NEVER-IN-UNION MEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 550) BEFORE ASKING THE ADOLESCENT FOR HIS CONSENT. CIRCLE CODE '2' IN 552 IF THE PARENT (OTHER ADULT) REFUSES. CONDUCT THE TEST ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT.

As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very serious illness
The HIV test is being done to see how big the AIDS problem is in Swaziland.
For the HIV test, we need a few more drops of blood from a finger. Again the equipment used in taking the blood is clean and completely safe.
It has never been used before and will be thrown away after each test.
No names will be attached to the blood sample which will keep the results completely anonymous. For this reason, we will not be able to know (your/NAME OF ADOLESCENT) test results, and so we will not be able to tell you the test results either.

If you want to know whether you (your child) have HIV, I can provide you with a list of nearby facilities offering counseling and testing for HIV.
I will also give you a voucher for free services that you can use at any of these facilities.
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide
Will you (allow NAME OF ADOLESCENT to) take the HIV test?

|  |  | MAN 1 | MAN 2 | MAN 3 |
| :---: | :---: | :---: | :---: | :---: |
| 544 | LINE NUMBER <br> (COLUMNS 10 AND 11) <br> NAME <br> (COLUMN 2) <br> AGE <br> (COLUMN 7) | LINE NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ | LINE NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ | LINE NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS |
|  | asking people all over the doing the HIV test to se uld like you to take the t not been used before and not write your name on want to know if you have so give you a note for fre have any questions? <br> nay sas to the test, or want to be tested for HI | CONSENT STATEMENT FOR <br> country to take an HIV test. HIV is the vir how big the AIDS problem is in Swazilan <br> You will have to give a few drops of blo e will throw it away after we use it with y blood sample. No one will know that it is <br> V, I can provide you the names of places esting that you can use at any of these pac <br> can say no. It is up to you to decide. | TEST FROM BOYS AGE 12-14 hat causes AIDS. AIDS is a very serio om a finger. The needle we use is cle ur blood. We will not be able to give y can help you. s. | ess <br> d completely safe <br> test results |
| 557 | CHECK 556: OUTCOME OF HIV TEST |  |  |  |
| 558 | A FINAL OUTCOME FOR THE ANAEMIA TEST PROCEDURE MUST BE RECORDED IN 552 AND FOR THE HIV TEST PROCEDURE IN 554 FOR EACH ELIGIBLE MAN EVEN IF HE WAS NOT PRESENT, REFUSED, OR COULD NOT BE TESTED FOR SOME OTHER REASON. |  |  |  |
| 559 | READ THE CONSENT STATEMENT FOR ADDITIONAL TESTS WITH LEFT OVER BLOOD. FOR BOYS AGE 12-14 AND NEVER-IN UNION MEN AGE 15-17, ASK CONSENT FROM PARENT/OTHER ADULT IDENTIFIED IN 550 BEFORE ASKING RESPONDENT'S CONSENT. |  |  | GRANTED . . . . . . . . . . . . . . . . . 1 <br> PARENT/OTHER RESPONSIBLE <br> ADULT REFUSED............. 2 <br> RESPONDENT <br> REFUSED . . . . . . . . . . . . . . . . . . 3 |
| 560 | ADDITIONAL TESTS | CHECK 559: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 559: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 559: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. |
| READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 559 IF RESPONDENT CONSENTS TO THE ADDITIONAL TESTS AND CODE '3' IF HE REFUSES. <br> FOR BOYS AGE 12-14 AND NEVER-IN-UNION MEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 550) BEFORE ASKING THE ADOLESCENT FOR HIS CONSENT. CIRCLE CODE '2' IN 558 IF THE PARENT (OTHER ADULT) REFUSES. CIRCLE CODE '1' IN 559 ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT. <br> We ask you to allow the Central Statistical Office to store part of the blood sample at the laboratory to be used for testing or research in the future. We are not certain about what tests might be done. <br> The blood sample will not have any name or other data attached that could identify (you/NAME OF ADOLESCENT). You do not have to agree. Will you allow us to keep the blood sample stored for later testing or research? |  |  |  |  |
| CONSENT STATEMENT FOR STORAGE OF SAMPLE FROM BOYS AGE 12-14 <br> We ask you to allow the Central Statistical Office to store part of the blood sample at the laboratory to be used for testing or research in the future. We are not certain about what tests might be done. <br> The blood sample will not have any name or other data attached that could identify you. You do not have to agree. Will you allow us to keep the blood sample stored for later testing or research? |  |  |  |  |

WEIGHT, HEIGHT, HAEMOGLOBIN MEASUREMENT AND HIV TESTING FOR MEN AGE 12 AND OLDER

|  |  | MAN 4 | MAN 5 | MAN 6 |
| :---: | :---: | :---: | :---: | :---: |
| 544 | LINE NUMBER (COLUMNS 10 AND 11) NAME (COLUMN 2) <br> AGE (COLUMN 7) | LINE <br> NUMBER $\square$ <br> NAME <br> AGE IN YEARS $\qquad$ | LINE NUMBER $\square$ <br> NAME $\qquad$ AGE IN YEARS | LINE <br> NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ |
| 545 | WEIGHT <br> IN KILOGRAMS | KG. ..... <br>  | KG. $\square$ $\square$ | KG. ....   |
| 546 | HEIGHT <br> IN CENTIMETRES | CM. ...... $\square \square \square$ |  | CM. ....  <br>   |
| 547 | RESULT OF WEIGHT <br> AND HEIGHT MEASUREMENT |  |  |  |
| 548 | CHECK 544: AGE | $12-14$ YEARS$\ldots \ldots$. $1 \longrightarrow 550$  <br> $15-17$ YEARS$\ldots \ldots$. 2  <br> $18+$ YEARS $\ldots .$. $3 \longrightarrow 551$ |  | $12-14$ YEARS$\ldots \ldots$. $1 \longrightarrow 550$  <br> $15-17$ YEARS $\ldots .$. 2 <br> $18+$ YEARS $\ldots . .$. $3 \longrightarrow 551$ |
| 549 | CHECK COLUMN 8: MARITAL STATUS |  |  | $\begin{array}{llll} \text { CODE } 4 \text { (NEVER IN UNION) } & \ldots & 1 \\ \text { OTHER } & \ldots \ldots \ldots \ldots \ldots \ldots \ldots & 2 \\ & (\text { GO TO } 551) \end{array}$ |
| 550 | RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED. | LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT | LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT | LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT |
| 551 | READ ANAEMIA TEST CONSENT STATEMENT. FOR BOYS AGE 12-14 AND NEVER-IN UNION MEN AGE 15-17, ASK CONSENT FROM PARENT/OTHER ADULT IDENTIFIED IN 550 BEFORE ASKING RESPONDENT'S CONSENT. |  |  |  |

## CONSENT STATEMENT FOR ANAEMIA TEST FROM MEN AGE 15 AND OLDER

READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE ' 1 ' IN 551 IF RESPONDENT CONSENTS TO THE ANAEMIA TEST AND CODE '3' IF HE REFUSES.
FOR BOYS AGE 12-14 AND NEVER-IN-UNION MEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 550) BEFORE ASKING THE ADOLESCENT FOR HIS CONSENT. CIRCLE CODE ' 2 ' IN 551 IF THE PARENT (OTHER ADULT) REFUSES. CONDUCT THE TEST ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT.
As part of this survey, we are asking people all over the country to take an anaemia test. Anaemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anaemia.
For the anaemia testing, we will need a few drops of blood from a finger. The equipment used in taking the blood is clean and completely safe.
It has never been used before and will be thrown away after each test.
The blood will be tested for anaemia immediately, and the result told to you right away. The result will be kept confidential.
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide.
Will you (allow NAME OF ADOLESCENT to) take the anaemia test?

| CONSENT STATEMENT FOR ANAEMIA TEST FROM BOYS AGE 12-14 <br> We are asking children like you to take a blood test. The test is for a problem in the blood that can happen when a person does not eat well or has been sick. This will help the government to plan programs to prevent and treat this problem in children. <br> We would like you to take the test. You will have to give a few drops of blood from a finger. The needle we use is clean and safe. It has not been used before and we will throw it away after we use it with you. <br> We will do the blood test right away and tell you the results. No one will be told the results. <br> Do you have any questions? <br> You can say yes to the test, or you can say no. It is up to you to decide. <br> Do you want to be tested for this blood problem? |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  | MAN 1 |  | MAN 2 | MAN 3 |
| 544 | LINE NUMBER <br> (COLUMNS 10 AND 11) <br> NAME <br> (COLUMN 2) <br> AGE <br> (COLUMN 7) | LINE NUMBER <br> NAME $\qquad$ <br> AGE IN YEAR |  | LINE <br> NUMBER <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ | LINE <br> NUMBER <br> NAME $\qquad$ <br> AGE IN YEARS $\qquad$ $\square$ |
| 552 | READ THE HIV TEST CONSENT STATEMENT. FOR BOYS AGE 12-14 AND NEVER-IN UNION MEN AGE 15-17, ASK CONSENT FROM PARENT/OTHER ADULT IDENTIFIED IN 550 BEFORE ASKING RESPONDENT'S CONSENT. | GRANTED $\ldots \ldots \ldots \ldots \ldots \ldots$ <br> PARENT/OTHER RESPONSIBLE <br> ADULT REFUSED $\ldots \ldots \ldots \ldots$ <br> RESPONDENT <br> REFUSED $\ldots \ldots \ldots \ldots \ldots \ldots$ <br> (SIGN) <br> (IF CODE '2' OR '3' CIRCLED, <br> CIRCLE '3' IN 556) |  |  | GRANTED $\ldots \ldots \ldots \ldots \ldots \ldots$PARENT/OTHER RESPONSIBLE <br> ADULT REFUSED $\ldots \ldots \ldots \ldots$RESPONDENT <br> REFUSED $\ldots \ldots \ldots \ldots \ldots \ldots$(SIGN) <br> (IF CODE '2' OR '3' CIRCLED, <br> CIRCLE '3' IN 556) |
| 553 | RECORD HAEMOGLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET. |  |  | G/DL $\ldots \ldots . .$$\square$ |  |
| 554 | RECORD RESULT CODE OF HAEMOGLOBIN MEASUREMENT. | MEASURED <br> NOT PRESENT <br> REFUSED <br> OTHER |  |  |  |
| 555 | BAR CODE LABEL | PUT THE FIRST HERE. <br> PUT THE SECO ON THE RESPO FILTER PAPER ON THE TRANS | BAR CODE LABEL <br> ND BAR CODE LABEL NDENT'S AND THE THIRD MITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. | PUT THE FIRST BAR CODE LABEL HERE. <br> PUT THE SECOND BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER AND THE THIRD ON THE TRANSMITTAL FORM. |
| 556 | OUTCOME OF HIV TEST PROCEDURE | BLOOD TAKEN NOT PRESENT REFUSED OTHER | $\begin{array}{ll}\text { an........ } & 1 \\ \ldots \ldots \ldots \ldots \ldots & 2 \\ \ldots \ldots \ldots \ldots \ldots & 3 \\ \ldots \ldots \ldots \ldots & 6\end{array}$ |  |  |
| CONSENT STATEMENT FOR HIV TEST FROM MEN AGE 15 AND OLDER |  |  |  |  |  |
| READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 552 IF RESPONDENT CONSENTS TO THE HIV TEST AND CODE ' 3 ' IF HE REFUSES. <br> FOR BOYS AGE 12-14 AND NEVER-IN-UNION MEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 550) BEFORE ASKING THE ADOLESCENT FOR HIS CONSENT. CIRCLE CODE '2' IN 552 IF THE PARENT (OTHER ADULT) REFUSES. CONDUCT THE TEST ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT. <br> As part of the survey we also are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very serious illness. The HIV test is being done to see how big the AIDS problem is in Swaziland. <br> For the HIV test, we need a few more drops of blood from a finger. Again the equipment used in taking the blood is clean and completely safe. It has never been used before and will be thrown away after each test. <br> No names will be attached to the blood sample which will keep the results completely anonymous. For this reason, we will not be able to know (your/NAME OF ADOLESCENT) test results, and so we will not be able to tell you the test results either. <br> If you want to know whether you (your child) have HIV, I can provide you with a list of nearby facilities offering counseling and testing for HIV. I will also give you a voucher for free services that you can use at any of these facilities. <br> Do you have any questions? <br> You can say yes to the test, or you can say no. It is up to you to decide. <br> Will you (allow NAME OF ADOLESCENT to) take the HIV test? |  |  |  |  |  |



## CONSENT STATEMENT FOR HIV TEST FROM BOYS AGE 12-14

We are asking people all over the country to take an HIV test. HIV is the virus that causes AIDS. AIDS is a very serious illness. We are doing the HIV test to see how big the AIDS problem is in Swaziland

We would like you to take the test. You will have to give a few drops of blood from a finger. The needle we use is clean and completely safe.
It has not been used before and we will throw it away after we use it with you.
We will not write your name on the blood sample. No one will know that it is your blood. We will not be able to give you the test results.
If you want to know if you have HIV, I can provide you the names of places that can help you.
I will also give you a note for free testing that you can use at any of these places
Do you have any questions?
You can say yes to the test, or you can say no. It is up to you to decide.
Do you want to be tested for HIV?

|  |  | MAN 1 | MAN 2 | MAN 3 |
| :---: | :---: | :---: | :---: | :---: |
| 544 | LINE NUMBER <br> (COLUMNS 10 AND 11) <br> NAME <br> (COLUMN 2) <br> AGE <br> (COLUMN 7) | LINE NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\square$ | LINE NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS $\square$ | LINE NUMBER $\square$ <br> NAME $\qquad$ <br> AGE IN YEARS |
| 557 | CHECK 556: OUTCOME OF HIV TEST |  |  |  |
| 558 | A FINAL OUTCOME FOR THE ANAEMIA TEST PROCEDURE MUST BE RECORDED IN 552 AND FOR THE HIV TEST PROCEDURE IN 554 FOR EACH ELIGIBLE MAN EVEN IF HE WAS NOT PRESENT, REFUSED, OR COULD NOT BE TESTED FOR SOME OTHER REASON. |  |  |  |
| 559 | READ THE CONSENT STATEMENT FOR ADDITIONAL TESTS WITH LEFT OVER BLOOD. FOR BOYS AGE 12-14 AND NEVER-IN UNION MEN AGE 15-17, ASK CONSENT FROM PARENT/OTHER ADULT IDENTIFIED IN 550 BEFORE ASKING RESPONDENT'S CONSENT. |  |  |  |
| 560 | ADDITIONAL TESTS | CHECK 559: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 559: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. | CHECK 559: <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TEST" ON THE FILTER PAPER. |

CONSENT STATEMENT FOR STORAGE OF SAMPLE FROM MEN AGE 15 AND OLDER
READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 559 IF RESPONDENT CONSENTS TO THE ADDITIONAL TESTS AND CODE ' 3 ' IF HE REFUSES.

FOR BOYS AGE 12-14 AND NEVER-IN-UNION MEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 550) BEFORE ASKING THE ADOLESCENT FOR HIS CONSENT. CIRCLE CODE '2' IN 559 IF THE PARENT (OTHER ADULT) REFUSES. CIRCLE CODE '1' IN 559 ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT.
We ask you to allow the Central Statistical Office to store part of the blood sample at the laboratory
to be used for testing or research in the future. We are not certain about what tests might be done.
The blood sample will not have any name or other data attached that could identify (you/NAME OF ADOLESCENT). You do not have to agree. Will you allow us to keep the blood sample stored for later testing or research?

## CONSENT STATEMENT FOR STORAGE OF SAMPLE FROM BOYS AGE 12-14

We ask you to allow the Central Statistical Office to store part of the blood sample at the laboratory
to be used for testing or research in the future. We are not certain about what tests might be done.
The blood sample will not have any name or other data attached that could identify you. You do not have to agree Will you allow us to keep the blood sample stored for later testing or research?

## 2006 SWAZILAND DEMOGRAPHIC AND HEALTH SURVEY WOMEN'S QUESTIONNAIRE



Hello. My name is $\qquad$ and I am working with the Central Statistical Office. We are conducting a national survey about the health of women, men and children. We would very much appreciate your participation in this survey. I would like to ask you about your health and the health of your children. This information will help the government to plan health services. The survey usually takes an hour to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
May I begin the interview now?


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 101 | RECORD THE TIME. | HOUR <br> MINUTES |  |  |
| 102 | How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? <br> IF LESS THAN ONE YEAR, RECORD '00' YEARS. | YEARS <br> ALWAYS <br> VISITOR |  | $\xrightarrow{\longrightarrow} 104$ |
| 103 | Just before you moved here, did you live in a city, in a town, or in the countryside? | CITY <br> TOWN COUNTRYSIDE | $\begin{aligned} & \ldots . . \\ & \ldots \\ & \ldots . . \\ & \ldots \end{aligned}$ |  |
| 104 | In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away? | NUMBER OF TRIPS NONE |  | $\longrightarrow 106$ |
| 105 | In the last 12 months, have you been away from your home community for more than one month at a time? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & \ldots . . . \\ & \ldots \\ & \ldots \end{aligned}$ |  |
| 106 | In what month and year were you born? | MONTH <br> DON'T KNOW MONTH <br> YEAR $\square$ <br> DON'T KNOW YEAR |   <br> $\ldots . .98$ <br>  |  |
| 107 | How old were you at your last birthday? <br> COMPARE AND CORRECT 106 AND/OR 107 IF INCONSISTENT. | AGE IN COMPLETED YEARS |  |  |
| 108 | Have you ever attended school? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & \ldots . . \\ & \ldots \\ & \ldots \end{aligned}$ | $\longrightarrow 112$ |
| 109 | What is the highest level of school you attended: primary, secondary, or higher? | LOWER PRIMARY HIGHER PRIMARY SECONDARY <br> HIGH SCHOOL TERTIARY | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots . . & 2 \\ \ldots \ldots & 3 \\ \ldots \ldots & 4 \\ \ldots \ldots & 5 \end{array}$ |  |
| 110 | What is the highest (grade/form/year) you completed at that level? | GRADE/FORM/YEAR . . . | $1$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 111 | CHECK 109: |  | $\rightarrow 115$ |
| 112 | Now I would like you to read this sentence to me. <br> SHOW CARD TO RESPONDENT. <br> IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: <br> Can you read any part of the sentence to me? |  |  |
| 113 | Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 114 | CHECK 112: |  | $\rightarrow 116$ |
| 115 | Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY . . . . . . . . . . . . . . . <br> AT LEAST ONCE A WEEK . . . . . . . . |  |
| 116 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY . . . . . . . . . . . . . . . |  |
| 117 | Do you watch television almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY . . . . . . . . . . . . . . . <br> AT LEAST ONCE A WEEK . . . . . . . . <br> 2 <br> LESS THAN ONCE A WEEK . . . . . . |  |
| 118 | What is your religion? <br> NAME OF CHURCH |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 201 | Now I would like to ask about all the births you have had during your life. Have you ever given birth? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 206$ |
| 202 | Do you have any sons or daughters to whom you have given birth who are now living with you? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 204$ |
| 203 | How many sons live with you? <br> And how many daughters live with you? <br> IF NONE, RECORD '00'. | SONS AT HOME DAUGHTERS AT HOME |  |
| 204 | Do you have any sons or daughters to whom you have given birth who are alive but do not live with you? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 206$ |
| 205 | How many sons are alive but do not live with you? <br> And how many daughters are alive but do not live with you? <br> IF NONE, RECORD '00'. | SONS ELSEWHERE DAUGHTERS ELSEWHERE $\square$ |  |
| 206 | Have you ever given birth to a boy or girl who was born alive but later died? <br> IF NO, PROBE: Any baby who cried or showed signs of life but did not survive? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . | $\longrightarrow 208$ |
| 207 | How many boys have died? <br> And how many girls have died? <br> IF NONE, RECORD '00'. | BOYS DEAD <br> GIRLS DEAD |  |
| 208 | SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'. | TOTAL |  |
| 209 | CHECK 208: <br> Just to make sure that I have this right: you have had in TOTAL $\qquad$ births during your life. Is that correct? <br> PROBE AND <br> YES CORRECT <br> 201-208 AS NECESSARY. |  |  |
| 210 | CHECK 208: <br> ONE OR MORE <br> NO BIRTHS BIRTHS |  | $\rightarrow 226$ |


| 211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had. RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES. (IF THERE ARE MORE THAN 12 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE). |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 212 <br> What name was given to your (first/next) baby? <br> (NAME) | 213 <br> Were <br> any of <br> these <br> births <br> twins <br> or multiple? | 214 <br> Is <br> (NAME) <br> a boy or <br> a girl? | 215 <br> In what month and year was (NAME) born? <br> PROBE: <br> What is his/her birthday? | 216 <br> Is <br> (NAME) <br> still <br> alive? | 217 <br> IF ALIVE: <br> How old was (NAME) at his/her last birthday? <br> RECORD AGE IN COMPLETED YEARS. | 218 <br> IF ALIVE: <br> Is (NAME) <br> living with you? | 219 <br> IF ALIVE: <br> RECORD HOUSE- <br> HOLD LINE <br> NUMBER OF <br> CHILD <br> (RECORD '00' <br> IF CHILD NOT LISTED IN HOUSEHOLD). | 220 <br> IF DEAD: <br> How old was (NAME) when he/she died? <br> IF '1 YR', PROBE: <br> How many months old was (NAME)? <br> RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS. | 221 <br> Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth? |
| 01 | $\begin{array}{ll} \text { SING } & 1 \\ \text { MULT } & 2 \end{array}$ | $\begin{array}{ll} \text { BOY } & 1 \\ \text { GIRL } & 2 \end{array}$ | MONTH $\square$ YEAR | $\begin{array}{r} \text { YES . . } 1 \\ \text { NO . . . } 2 \\ \downarrow \\ \downarrow \\ 220 \end{array}$ | AGE IN <br> YEARS | $\begin{aligned} & \text { YES ... } 1 \\ & \text { NO ... } 2 \end{aligned}$ | LINE NUMBER <br> (NEXT BIRTH) | DAYS ... 1 <br> MONTHS 2 <br> YEARS . . 3 $\square$ |  |
| 02 | SING 1 <br> MULT 2 | $\begin{array}{ll} \text { BOY } & 1 \\ \text { GIRL } & 2 \end{array}$ | MONTH $\square$ YEAR | $\begin{aligned} & \text { YES . . } 1 \\ & \text { NO . . . } \\ & \vdots \\ & 2 \\ & 220 \end{aligned}$ | AGE IN YEARS | $\begin{aligned} & \text { YES ... } 1 \\ & \text { NO ... } 2 \end{aligned}$ | LINE NUMBER |  | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . } 2 \end{aligned}$ |
| 03 | SING 1 <br> MULT 2 | $\begin{array}{ll} \text { BOY } & 1 \\ \text { GIRL } & 2 \end{array}$ | MONTH $\square$ <br> YEAR | $\begin{aligned} & \text { YES . . } 1 \\ & \text { NO . . . } \\ & 2 \\ & \vdots \\ & 220 \end{aligned}$ | AGE IN <br> YEARS | $\begin{aligned} & \text { YES ... } 1 \\ & \text { NO ... } 2 \end{aligned}$ | LINE NUMBER (GO TO 221) | $\begin{gathered} \text { DAYS . . } 1 \\ \text { MONTHS } 2 \\ \text { YEARS . . } 3 \end{gathered}$ | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO .... . } 2 \end{aligned}$ |
| 04 | SING 1 <br> MULT 2 | $\begin{array}{ll} \text { BOY } & 1 \\ \text { GIRL } & 2 \end{array}$ | MONTH $\square$ <br> YEAR | $\begin{array}{r} \text { YES . . } 1 \\ \text { NO . . . } \\ \\ \vdots \\ \downarrow \\ 220 \end{array}$ | AGE IN YEARS | $\begin{aligned} & \text { YES . . . } 1 \\ & \text { NO . . . } 2 \end{aligned}$ | LINE NUMBER (GO TO 221) | $\begin{aligned} & \text { DAYS . . } 1 \\ & \text { MONTHS } 2 \\ & \text { YEARS . . } 3 \end{aligned}$ | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . } 2 \end{aligned}$ |
| 05 | SING 1 <br> MULT 2 | $\begin{array}{ll} \text { BOY } & 1 \\ \text { GIRL } & 2 \end{array}$ | MONTH $\square$ <br> YEAR | $\begin{array}{r} \text { YES . . } 1 \\ \text { NO . . . } \\ \\ \vdots \\ \downarrow \\ 220 \end{array}$ | AGE IN <br> YEARS | $\begin{aligned} & \text { YES ... } 1 \\ & \text { NO . . . } 2 \end{aligned}$ | LINE NUMBER | $\begin{gathered} \text { DAYS . . } 1 \\ \text { MONTHS } 2 \\ \text { YEARS . . } 3 \end{gathered}$ | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . . } 2 \end{aligned}$ |
| 06 | $\begin{array}{ll} \text { SING } & 1 \\ \text { MULT } & 2 \end{array}$ | $\begin{array}{ll} \text { BOY } & 1 \\ \text { GIRL } & 2 \end{array}$ | MONTH $\square$ YEAR | $\begin{aligned} & \text { YES . . } 1 \\ & \text { NO . . . } \\ & \\ & \vdots \\ & 220 \end{aligned}$ | AGE IN YEARS | $\begin{aligned} & \text { YES ... } 1 \\ & \text { NO .... } 2 \end{aligned}$ | LINE NUMBER | $\begin{array}{cc} \text { DAYS ... } 1 \\ \text { MONTHS } & 1 \\ \text { YEARS . . } 3 \end{array}$ | $\begin{aligned} & \text { YES . . . } 1 \\ & \text { NO . . . . } 2 \end{aligned}$ |
| 07 | $\begin{array}{ll} \text { SING } & 1 \\ \text { MULT } & 2 \end{array}$ | $\begin{array}{ll} \text { BOY } & 1 \\ \text { GIRL } & 2 \end{array}$ | MONTH $\square$ <br> YEAR | $\begin{array}{r} \text { YES . . } 1 \\ \text { NO . . . } 2 \\ \vdots \\ 220 \end{array}$ | AGE IN YEARS | $\begin{aligned} & \text { YES ... } 1 \\ & \text { NO .... } 2 \end{aligned}$ | LINE NUMBER (GO TO 221) | DAYS ... 1 <br> MONTHS 2 <br> YEARS . . 3 | $\begin{aligned} & \text { YES . . . . } 1 \\ & \text { NO . . . . . } 2 \end{aligned}$ |




| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 234 | ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2001. <br> ENTER 'T' IN THE CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS. |  |  |  |
| 235 | Did you have any pregnancies that terminated before 2001 that did not result in a live birth? | YES NO | $\begin{array}{ll} \ldots & 1 \\ \ldots & 2 \end{array}$ | $\longrightarrow 237$ |
| 236 | When did the last such pregnancy that terminated before 2001 end? | MONTH DON'T KNOW MONTH <br> YEAR $\square$ DON'T KNOW YEAR |  |  |
| 237 | When did your last menstrual period start? <br> (DATE, IF GIVEN) |  | 994 <br> 995 <br> 996 |  |
| 238 | From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots & 1 \\ \ldots & 2 \\ \ldots & 8 \end{array}$ | $\xrightarrow{\longrightarrow} 301$ |
| 239 | Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods? | JUST BEFORE HER PERIOD BEGINS <br> DURING HER PERIOD <br> RIGHT AFTER HER <br> PERIOD HAS ENDED . . . . . <br> HALFWAY BETWEEN <br> TWO PERIODS <br> OTHER $\qquad$ | $\begin{array}{cc} \ldots . & 1 \\ \ldots & 2 \\ \ldots & 3 \\ \ldots . & 4 \\ \ldots & 6 \end{array}$ |  |

SECTION 3. CONTRACEPTION

| 301 | Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. <br> Which ways or methods have you heard about? <br> FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: <br> Have you ever heard of (METHOD)? <br> CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302. |  | 302 Have you ever used (METHOD)? |  |
| :---: | :---: | :---: | :---: | :---: |
| 01 | FEMALE STERILIZATION Women can have an operation to avoid having any more children. | $\begin{array}{llll} \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } \ldots \ldots \ldots \ldots \ldots & { }^{2} \eta \end{array}$ | Have you ever had an operation to avoid having any more children?$\begin{array}{lll} \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } \ldots \ldots \ldots \ldots \ldots & \ldots \end{array}$ |  |
| 02 | MALE STERILIZATION Men can have an operation to avoid having any more children. | $\begin{array}{llll} \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots & { }^{2} \eta \end{array}$ | Have you ever had a partner who had an operation to avoid having any more children? <br> YES <br> NO ...................... 2 |  |
| 03 | PILL Women can take a pill every day to avoid becoming pregnant. | YES $\ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots \ldots$ | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |
| 04 | IUD Women can have a loop or coil placed inside them by a doctor or a nurse. | $\begin{array}{llll} \text { YES } & \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots & { }^{2} \eta \end{array}$ | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |
| 05 | INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant for one or more months. | $\begin{array}{llll} \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots \ldots & { }^{2} \eta \end{array}$ | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |
| 06 | IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years. | $\begin{array}{llll} \text { YES } & \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots & { }^{2} \eta \end{array}$ | YES <br> No |  |
| 07 | CONDOM Men can put a rubber sheath on their penis before sexual intercourse. | YES NO | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |
| 08 | FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse. | YES $\ldots \ldots \ldots \ldots .$. NO $\quad \ldots \ldots \ldots \ldots$ | YES <br> NO |  |
| 09 | DIAPHRAM Women can place a thin flexible disk in their vagina before intercourse. | YES NO NO. | YES <br> NO |  |
| 10 | FOAM/JELLY Women can place a supersitory jelly or cream in thier vagina before intercourse. | $\begin{array}{llll} \begin{array}{ll} \text { YES } & \ldots \ldots \ldots \ldots \\ \text { NO } & \ldots \ldots \ldots \ldots \end{array}{ }^{2} \eta \end{array}$ | YES |  |
| 11 | LACTATIONAL AMENORRHEA METHOD (LAM) <br> Up to six months after childbirth, a woman can use a method that requires that she breastfeeds frequently day, and night and that her menstrual period has not returned. |  | YES <br> NO |  |
| 12 | RHYTHM/BILLINGS/MUCUS METHOD Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to be pregnant or the woman observes her discharge and temperature of the vagina. If the temperature is high and the discharge streches then she can avioid sexual intercourse | $\begin{array}{llll} \text { YES } & \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots & { }^{2} \eta \end{array}$ | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |
| 13 | WITHDRAWAL Men can be careful and pull out before climax. | YES NO NO. | YES <br> NO |  |
| 14 | EMERGENCY CONTRACEPTION Women can take pills up to five days after sexual intercourse to avoid becoming pregnant. | $\begin{array}{llll} \text { YES } \ldots \ldots \ldots \ldots \ldots & 1 \\ \text { NO } & \ldots \ldots \ldots \ldots & { }^{2} \eta \end{array}$ | YES <br> NO |  |
| 15 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? |  | $\begin{aligned} & \text { YES } \\ & \text { NO } \\ & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll} \cdots & 1 \\ \cdots & 2 \\ & \\ \cdots & 1 \\ \cdots & 2 \end{array}$ |
| 303 | CHECK 302: <br> NOT A SINGLE <br> AT LEAST ONE <br> "YES" <br> (NEVER USED) (EVER USED) |  |  | $\longrightarrow 307$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 304 | Have you ever used anything or tried in any way to delay or avoid getting pregnant? | $\begin{array}{l\|l} \text { YES } \ldots . . . \\ \text { NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } & 1 \\ 2 \end{array}$ | $\rightarrow 331$ |
| 306 | What have you used or done? <br> CORRECT 302 AND 303 (AND 301 IF NECESSARY). |  |  |
| 307 | Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. <br> How many living children did you have at that time, if any? <br> IF NONE, RECORD '00'. | NUMBER OF CHILDREN ..... $\square$ |  |
| 308 | CHECK 302 (01): <br> WOMAN NOT <br> WOMAN STERILIZED STERILIZED |  | $\rightarrow 311 \mathrm{~A}$ |
| 309 | CHECK 226: <br> NOT PREGNANT <br> PREGNANT OR UNSURE |  | $\rightarrow 331$ |
| 310 | Are you currently doing something or using any method to delay or avoid getting pregnant? |  | $\rightarrow 331$ |
| 311 | Which method are you using? <br> CIRCLE ALL MENTIONED. <br> IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST. <br> CIRCLE 'A' FOR FEMALE STERILIZATION. |  |  |
| 312 | RECORD IF PILL OR CONDOM IS HIGHEST METHOD ON LIST IN 311. <br> RECORD NAME OF BRAND IF PACKAGE SEEN. |  | $\xrightarrow{\square} \rightarrow 314$ |
| 313 | Do you know the brand name of the (pills/condoms) you are using? <br> RECORD NAME OF BRAND. |  |  |
| 314 | How many (pill cycles/condoms) did you get the last time? | NUMBER OF PILL CYCLES/CONDOMS $\square$ DON'T KNOW ...................... 998 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 314A | CHECK 311/311A: <br> CONDOM <br> PILL |  | $\rightarrow 315$ |
| 314B | How do you usually dispose of used condoms? |  |  |
| 315 | The last time you obtained (HIGHEST METHOD ON LIST IN 311), how much did you pay in total, including the cost of the method and any consultation you may have had? |  | $] \rightarrow 319 \mathrm{~A}$ |
| 316 | In what facility did the sterilization take place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> WRITE THE NAME OF THE PLACE. |  |  |
| 317 | CHECK 311/311A: |  |  |
| 318 | How much did you pay in total for the sterilization, including any consultation you may have had? |  |  |
| 319 319 A | In what month and year was the sterilization performed? <br> In what month and year did you start using (CURRENT METHOD) continuously? <br> PROBE: For how long have you been using (CURRENT METHOD) now without stopping? | MONTH <br> YEAR |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 320 | CHECK 319/319A, 215 AND 230: <br> ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 319/319A <br> GO BACK TO 319/319A, PROBE AND RECORD MONTH AND YEAR USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR | YES <br> NO <br> AT START OF CONTINUOUS REGNANCY TERMINATION). |  |
| 321 | CHECK 319/319A: <br> YEAR IS 2001 OR LATER | IS 2000 $\square$ ARLIER | $\rightarrow 329$ |
| 323 | CHECK 311/311A: <br> CIRCLE METHOD CODE: <br> IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST. |  |  |
| 324 | At the time you started using the (CURRENT METHOD), were you told about side effects or problems you might have with the method? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad 1$ NO . . . . . . . . . . . . . . | $\longrightarrow 326$ |
| 325 | Were you ever told by a health or family planning worker about side effects or problems you might have with the method? | YES .................................... . . . . . . . . . $\quad 1$ NO . . . . . . . . . . . . | $\longrightarrow 327$ |
| 326 | Were you told what to do if you experienced side effects or problems? |  |  |
| 327 | CHECK 324: | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . | $\longrightarrow 329$ |
| 328 | Were you ever told by a health or family planning worker about other methods of family planning that you could use? | YES ....................................... 1 NO . . . . . . . . . . . . . . . . . 2 |  |
| 329 | CHECK 311/311A: <br> CIRCLE METHOD CODE: <br> IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST. |  | $\longrightarrow 333$ $\longrightarrow 333$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 330 | Where did you obtain (CURRENT METHOD) the last time? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> WRITE THE NAME OF THE PLACE. |  | $\rightarrow \quad 333$ |
| 331 | Do you know of a place where you can obtain a method of family planning? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 333$ |
| 332 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. |  |  |


| NO. | QUESTIONS AND FILTERS |  | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 333 | In the last 12 months, were you visited by a RHM/CBD who talked to you about family planning? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll}  & \\ \ldots . . & 1 \\ \ldots . & 2 \end{array}$ |  |
| 334 | In the last 12 months, have you visited a health facility for care for yourself (or your children)? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots . . & 2 \end{array}$ | $\longrightarrow 401$ |
| 335 | Did any staff member at the health facility speak to you about family planning methods? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll} \ldots & 1 \\ \ldots . & 2 \end{array}$ |  |


| 401 | CHECK 224: <br> ONE OR MORE BIRTHS <br> IN 2001 OR LATER | BIR <br> OR LA |  |  | $\rightarrow 550$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 402 | ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2001 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. <br> (IF THERE ARE MORE THAN THREE BIRTHS, USE LAST TWO COLUMNS OF ADDITIONAL QUESTIONNAIRES). <br> Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.) |  |  |  |  |
| 403 | LINE NUMBER FROM 212 | LAST BIRTH <br> LINE <br> NUMBER . . . | NEXT-TO-LAST BIRTH <br> LINE <br> NUMBER . . . | SECOND-FROM- <br> LINE <br> NUMBER . . . | ST BIRTH |
| 404 | FROM 212 AND 216 | NAME $\qquad$ <br> LIVING $\square$ DEAD $\square$ | NAME $\qquad$ <br> LIVING $\square$ DEAD $\square$ | NAME $\qquad$ <br> LIVING $\square$ | EAD |
| 405 | At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all? |  |  | THEN <br> (SKIP TO LATER $\qquad$ <br> NOT AT ALL (SKIP TO |  |
| 406 | How much longer would you have liked to wait? |  | MONTHS YEARS | MONTHS 1 <br> YEARS 2 <br> DON'T KNOW |  |
| 407 | Did you see anyone for antenatal care for this pregnancy? <br> IF YES: Whom did you see? <br> Anyone else? <br> PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN. | HEALTH PROFESSIONAL  <br> DOCTOR ....... A <br> NURSE/MIDWIFE B <br> NURSING  <br> ASSISTANT . . . C <br> OTHER PERSON  <br> TRADITIONAL BIRTH  <br> ATTENDANT/  <br> RHM ....... D <br> TRADITIONAL  <br> HEALER ........ E <br> OTHER  <br> (SPECIFY)  <br> NO ONE |  |  |  |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TOLAST BIRTH NAME $\qquad$ | SECOND-FROMLAST BIRTH NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 408 | Where did you receive antenatal care for this pregnancy? <br> CIRCLE ALL MENTIONED. <br> IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. |  |  |  |
| 409 | How many months pregnant were you when you first received antenatal care for this pregnancy? | MONTHS . <br> DON'T KNOW |  |  |
| 410 | Including this first visit, how many times did you receive antenatal care during this pregnancy? | NUMBER OF TIMES $\square$ DON'T KNOW |  |  |
| 411 | As part of your antenatal care during this pregnancy, were any of the following done at least once? <br> Were you weighed? <br> Was your blood pressure measured? <br> Did you give a urine sample? Did you give a blood sample? Were you physically examined? |  YES NO  <br> WEIGHT . 1 2  <br>     <br> BP $\ldots \ldots \ldots$ 1 2  <br> URINE ......... 1 2  <br> BLOOD ..... 1 2  <br> EXAMINATION . 1 2  |  |  |
| 412 | During (any of) your antenata care visit(s), were you told about the signs of pregnancy complications? | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 414) <br> DON'T KNOW $\ldots \ldots$ 8 |  |  |
| 413 | Were you told where to go if you had any of these complications? | YES $\ldots \ldots \ldots .$. 1 <br> NO $\ldots \ldots \ldots .$. 2 <br> DON'T KNOW ................. 8 |  |  |
| 414 | During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth? |  |  |  |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO- <br> LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM- <br> LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 415 | During this pregnancy, how many times did you get tetanus injection? | TIMES $\square$ <br> DON'T KNOW |  |  |
| 416 | CHECK 415: |  |  |  |
| 417 | At any time before this pregnancy, did you receive any tetanus injections? | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 421) - <br> DON'T KNOW . . . . 8 |  |  |
| 418 | Before this pregnancy, how many times did you get a tetanus injection? <br> IF 7 OR MORE TIMES, RECORD '7'. | TIMES $\square$ <br> DON'T KNOW |  |  |
| 419 | In what month and year did you receive the last tetanus injection before this pregnancy? | MONTH <br> DK MONTH .......... 98 |  |  |
| 420 | How many years ago did you receive that tetanus injection? | YEARS <br> AGO |  |  |
| 421 | During this pregnancy, were you given or did you buy any iron tablets? <br> SHOW TABLETS | $\begin{aligned} & \text { YES, GIVEN . . . . . . . . } \\ & \text { YES, BOUGHT . . . . . . } \\ & \text { 1 } \\ & \text { NO . . . . . . . . . . } \\ & \text { (SKIP TO 422A) } \end{aligned}$ |  |  |
| 422 | During the whole pregnancy, for how many days did you take the tablets? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS. | NUMBER <br> OF $\square$ DAYS $\text { DON'T KNOW ... } 998$ |  |  |
| 422A | During this pregnancy, did you take any drug for intestinal worms? |  |  |  |
| 423 | During this pregnancy, did you have difficulty with your vision during daylight? | YES $\ldots \ldots \ldots \ldots$ $\ldots . .$. 1 <br> NO . . . . . . . . . . 2  <br> DON'T KNOW . . . . 8  |  |  |
| 424 | During this pregnancy, did you suffer from night blindness? | YES $\ldots \ldots \ldots . . . . . .$. 1 <br> NO . . . . . . . . . . 2 <br> DON'T KNOW . . . . 8 |  |  |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO- <br> LAST BIRTH <br> NAME $\qquad$ | SECOND-FROMLAST BIRTH NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 425 | During this pregnancy, did you take any drugs to prevent you from getting malaria? |  |  |  |
| 426 | What drugs did you take? <br> RECORD ALL MENTIONED. IF TYPE OF DRUG IS NOT DETERMINED, SHOW DRUGS TO RESPONDENT |  |  |  |
| 427 | CHECK 426: <br> DRUGS TAKEN FOR MALARIA PREVENTION. |  |  |  |
| 428 | How many times did you take Chloroquine during this pregnancy? | TIMES |  |  |
| 429 | When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small? | VERY LARGE ..... 1  <br> LARGER THAN   <br> AVERAGE . . . . 2  <br> AVERAGE ....... 3  <br> SMALLER THAN   <br> AVERAGE $\ldots .$. 4 <br> VERY SMALL $\ldots .$. 5 <br> DON'T KNOW . . . . 8  |  |  |
| 430 | Was (NAME) weighed at birth? | $\begin{gathered} \text { YES . . . . . . . . . . . . . } \\ \text { NO . . . . . . . . . . } \end{gathered}{ }^{1} 2$ |  | $\begin{gathered} \text { YES . . . . . . . . . . . . . } \\ \text { NO . . . . . . . . . } \end{gathered}{ }^{2}$ |
| 431 | How much did (NAME) weigh? <br> RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE. | KG FROM CARD <br> KG FROM RECALL <br> 2 $\square$ $\square$ DON'T KNOW . 99.998 | KG FROM CARD | KG FROM CARD <br> 1 $\square$ $\square$ |
| 432 | Who assisted with the delivery of (NAME)? <br> Anyone else? <br> PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING. <br> IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY. |  |  |  |



| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO- <br> LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM- <br> LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 439 | After you were discharged, did a health professional, a traditional birth attendant or a RHM conduct a physical examination on you? |  |  | YES . . . . . . . . . . . 1 <br> (SKIP TO 451) <br> NO . . . . . . . . . . 2 |
| 440 | Why didn't you deliver in a health facility? <br> PROBE: Any other reason? RECORD ALL MENTIONED. |  |  |  |
| 441 | After (NAME) was born, did a health professional, a traditional birth attendant, a RHM, or a traditional healer conduct a physical examination on you? |  |  | YES . . . . . . . . . . . . . . 1 |
| 442 | How many hours, days or weeks after delivery did the first check take place? <br> IF LESS THAN ONE DAY, RECORD HOURS. <br> IF LESS THAN ONE WEEK, RECORD DAYS. | HOURS 1 DAYS WEEKS 3 |  |  |
| 443 | Who checked on your health at that time? <br> PROBE FOR MOST QUALIFIED PERSON. | DOCTOR $\ldots \ldots$. 1  <br> NURSE/MIDWIFE . 2 <br> NURSING   <br> ASSISTANT $\ldots$ 3 <br> TRADITIONAL   <br> HEALER ......... 4  <br> TRADITIONAL BIRTH   <br> ATTENDANT/RHM 5  <br> OTHER 6  <br>    <br> (SPECIFY)   | . |  |



| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO- <br> LAST BIRTH NAME $\qquad$ | SECOND-FROMLAST BIRTH NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 448 | Where did this first check of (NAME) take place? <br> IF SOURCE IS HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. |  |  |  |
| 449 | Within the first two months after delivery, did you receive a vitamin A dose like (this/any of these)? <br> SHOW COMMON TYPES OF CAPSULES. | YES . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . 2 |  |  |
| 450 | Has your menstrual period returned since the birth of (NAME)? |  |  |  |
| 451 | Did your period return between the birth of (NAME) and your next pregnancy? |  |  |  |
| 452 | For how many months after the birth of (NAME) did you not have a period? | MONTHS <br> DON'T KNOW | MONTHS $\ldots$    <br> DK $\ldots$. $\ldots$. 98 | MONTHS . . . $\square$ <br> DON'T KNOW |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO- <br> LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM- <br> LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 453 | CHECK 226: IS RESPONDENT PREGNANT? | $\left.\begin{array}{l}\text { NOT } \\ \text { PREG- } \\ \text { NANT } \\ \square\end{array} \begin{array}{l}\text { PREGNANT } \\ \text { OR } \\ \text { UNSURE } \\ \text { (SKIP TO 455) }\end{array}\right]$ |  |  |
| 454 | Have you resumed sexual relations since the birth of (NAME)? | YES $\ldots \ldots \ldots \ldots \ldots$ NO . . . . . . . . . . . (SKIP TO 456) |  |  |
| 455 | For how many months after the birth of (NAME) did you not have sexual relations? | MONTHS <br> DON'T KNOW 98 | MONTHS <br> DON'T KNOW 98 | MONTHS <br> DON'T KNOW 98 |
| 456 | Did you ever breastfeed (NAME)? | $\begin{gathered} \text { YES } \ldots \ldots \ldots \ldots \ldots \\ \begin{array}{c} (\text { SKIP TO 457) . . . } \end{array} \\ \text { NO . . . . . . . . . . . } \end{gathered}$ | $\begin{aligned} & \text { YES . . . . . . . . . . . . } \\ & \begin{array}{l} 1 \\ (\text { SKIP TO 457) } \\ \text { NO . . . . . . . . . . . } \end{array} \end{aligned}$ | $\begin{aligned} & \text { YES . . . . . . . . . . . . } \\ & \begin{array}{l} 1 \\ \text { (SKIP TO 457) } \\ \text { NO . . . . . . . . . . . . } \end{array} \\ & \hline \end{aligned}$ |
| 456A | What was the main reason you did not breastfeed (NAME)? |  |  |  |
| 457 | How long after birth did you first put (NAME) to the breast? <br> IF LESS THAN 1 HOUR, RECORD '00' HOURS. <br> IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS. | IMMEDIATELY... 000 <br> HOURS 1 <br> DAYS |  |  |
| 458 | In the first three days after delivery, was (NAME) given anything to drink other than breast milk? | YES $\ldots \ldots \ldots \ldots \ldots$ <br> NO . . . . . . . . . . . |  |  |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO- <br> LAST BIRTH <br> NAME $\qquad$ | SECOND-FROMLAST BIRTH NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 459 | What was (NAME) given to drink? <br> Anything else? <br> RECORD ALL LIQUIDS MENTIONED. | MILK (OTHER THAN    <br> BREAST MILK )  A  <br> PLAIN WATER $\ldots$. B  <br> SUGAR OR GLU-    <br> COSE WATER  C  <br> GRIPE WATER $\ldots$. D  <br> SUGAR-SALT-WATER    <br> SOLUTION $\ldots .$. E  <br> FRUIT JUICE $\ldots . .$. F   <br> INFANT FORMULA G   <br> TEAIINFUSIONS $\ldots$. H   <br> HONEY $\ldots . . . . .$. I  <br> OTHER   X |  |  |
| 460 | CHECK 404: <br> IS CHILD LIVING? |  |  |  |
| 461 | Are you still breastfeeding (NAME)? | $\begin{aligned} & \text { YES . . . . . . . . . . . . } \\ & \begin{array}{l} 1 \\ (\text { SKIP TO 464) } \\ \text { NO . . . . . . . . . . . . } \end{array} \end{aligned}$ | $\begin{aligned} & \text { YES . . . . . . . . . . . . } \\ & \begin{array}{l} 1 \\ (\text { SKIP TO 466) } \ldots \ldots \\ \text { NO } \ldots \ldots \ldots \ldots \ldots . \end{array} \end{aligned}$ | $\begin{aligned} & \text { YES . . . . . . . . . . . . } \\ & \begin{array}{l} 1 \\ (\text { SKIP TO 466) } \\ \text { NO . . . . . . . . . . . . } \end{array} \\ & \hline \end{aligned}$ |
| 462 | For how many months did you breastfeed (NAME)? | MONTHS $\square$ <br> DON'T KNOW | MONTHS $\square$ <br> DON'T KNOW $\qquad$ 98 | MONTHS $\square$ <br> DON'T KNOW |
| 463 | CHECK 404: <br> IS CHILD LIVING? |  |  |  |
| 464 | How many times did you breastfeed last night between sunset and sunrise? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER. | NUMBER OF NIGHTTIME FEEDINGS |  |  |
| 465 | How many times did you breastfeed yesterday during the daylight hours? <br> IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER. | NUMBER OF DAYLIGHT FEEDINGS |  |  |
| 466 | Did (NAME) drink anything from a bottle with a nipple yesterday or last night? | YES $\ldots \ldots \ldots \ldots$ $\ldots$ <br> NO $\ldots \ldots . . .$. 1 <br> DON'T KNOW . . . . . . 8 | YES $\ldots \ldots \ldots \ldots$ $\ldots$ <br> NO $\ldots \ldots . .$. 1 <br> DON'T KNOW . . . . . . . 2 | YES $\ldots \ldots \ldots \ldots$ $\ldots$ <br> NO $\ldots \ldots . .$. 1 <br> DON'T KNOW . . . . . . 2 |
| 467 |  | GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501. | GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501. | GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501. |


| 501 | ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2001 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. <br> (IF THERE ARE MORE THAN THREE BIRTHS, USE LAST TWO COLUMNS OF ADDITIONAL QUESTIONNAIRES). |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 502 | LINE NUMBER <br> FROM 212 | LAST BIRTH <br> LINE NUMBER | NEXT-TO-LAST BIRTH <br> LINE <br> NUMBER | $\begin{aligned} & \text { SECOND-FROM-LAST BIRTH } \\ & \text { LINE } \\ & \text { NUMBER } \\ & \text { N........ } \\ & \hline \end{aligned}$ |
| 503 | FROM 212 <br> AND 216 |  |  |  |
| 504 | Has (NAME) ever received a vitamin A dose like (this/any of these)? <br> SHOW CAPSULES. |  |  |  |
| 505 | How many months ago did (NAME) take the last dose? | MONTHS AGO DON'T KNOW | MONTHS AGO DON'T KNOW | MONTHS AGO DON'T KNOW |
| 506 | Is (NAME) currently taking iron pills like this (any of these)? |  |  |  |
| 506A | Has (NAME) taken any tablet or syrup for intestinal worms worms in the past six months? |  |  |  |
| 507 | Do you have a card where (NAME'S) vaccinations are written down? <br> IF YES: <br> May I see it please? |  |  |  |
| 508 | Did you ever have a vaccination card for (NAME)? |  |  |  |



| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 510 | Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a national immunization day campaign? <br> RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 0-3, DPT 1-3, AND/OR MEASLES VACCINES. |  |  |  |
| 511 | Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign? |  |  |  |
| 512 | Please tell me if (NAME) received any of the following vaccinations: <br> A BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually leaves a scar? | YES $\ldots \ldots . . . . . .$. 1 <br> NO . . . . . . . . . . . . 2 <br> DON'T KNOW . . . 8 | YES $\ldots \ldots . . . . . .$. 1 <br> NO . . . . . . . . . . . . 2 <br> DON'T KNOW . . . 8 |  |
| 512B | Polio vaccine, that is, drops in the mouth? | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> $($ SKIP TO $512 E)$ $\underbrace{}_{1}$ <br> DON'T KNOW ..... 8 | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO $512 E) \longleftarrow$ -1 <br> DON'T KNOW . . . . 8 | YES $\ldots \ldots \ldots \ldots \ldots$ <br> NO $\ldots \ldots \ldots \ldots$ <br> (SKIP TO $512 E)$ <br> DON'T KNOW $\ldots$ |
| 512C | Was the first polio vaccine received in the first two weeks after birth or later? | FIRST 2 WEEKS . . . . 1 LATER . . . . . . . . . . 2 | $\begin{array}{lll}\text { FIRST } 2 \text { WEEKS . . . } & 1 \\ \text { LATER . . . . . . . . . . } & 2\end{array}$ | $\begin{aligned} & \text { FIRST } 2 \text { WEEKS . . . } \\ & \text { LATER . . . . . . . . . . } \\ & 2 \end{aligned}$ |
| 512D | How many times was the polio vaccine received? | NUMBER OF TIMES | NUMBER OF TIMES | NUMBER OF TIMES |
| 512E | A DPT vaccination, that is, an injection given in the thigh sometimes at the same time as polio drops? | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO $512 G)$ $\underbrace{}_{1}$ <br> DON'T KNOW ..... 8 | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO $512 G)$ $\sum_{1}$ <br> DON'T KNOW ..... 8 | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO . . . . . . . . . . 2 <br> (SKIP TO 512G)  <br> DON'T KNOW ..... 8 |
| 512F | How many times was a DPT vaccination received? | NUMBER OF TIMES $\square$ | NUMBER OF TIMES $\square$ | NUMBER OF TIMES $\square$ |
| 512G | An HBV injection given on the thigh sometimes with polio drops? |  |  |  |
| 512 H | How many times was an HBV vaccination received? <br> This is an injection that is usually given in the thigh. | NUMBER OF TIMES $\square$ | NUMBER OF TIMES $\square$ | NUMBER OF TIMES $\square$ |
| 5121 | An injection to prevent measles? This injection is usually given in the left upper arm. | YES $\ldots \ldots \ldots . . .$. 1 <br> NO $\ldots \ldots \ldots . .$. 2 <br> DON'T KNOW ...... 8 | YES $\ldots \ldots \ldots . . .$. 1  <br> NO $\ldots \ldots \ldots$ $\ldots$ 2 <br> DON'T KNOW ...... 8  | YES $\ldots \ldots \ldots . .$. 1 <br> NO . . . . . . . . . . 2 <br> DON'T KNOW . . . . 8 |
| 513 | Were any of the vaccinations (NAME) received during the last two years given as part of a national immunization day campaign? |  |  |  |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 514 | At which national immunization day campaigns did (NAME) receive vaccinations? <br> RECORD ALL CAMPAIGNS MENTIONED. | POLIO AND VIT A <br> (JULY 2004) ... A <br> MEASLES AND VIT A <br> (JULY 2006) ... B | POLIO AND VIT A <br> (JULY 2004) ... A <br> MEASLES AND VIT A <br> (JULY 2006) ... B | POLIO AND VIT A <br> (JULY 2004) ... A <br> MEASLES AND VIT A <br> (JULY 2006) ... B |
| 515 | Has (NAME) had diarrhoea in the last two weeks? |  |  | YES $\ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ $\ldots$ <br> (SKIP TO 530)  <br> DON'T KNOW $\ldots .$. 8 |
| 516 | Was there any blood in the stools? | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO . . . . . . . . . . . . 2 <br> DON'T KNOW . . . . 8 | YES $\ldots \ldots \ldots . . .$. 1 <br> NO . . . . . . . . . . . 2 <br> DON'T KNOW . . . . 8 | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots . . . .$. 2 <br> DON'T KNOW ...... 8 |
| 517 | Now I would like to know how much (NAME) was given to drink during the diarrhoea. Was he/she given less than usual to drink, about the same amount or more than usual to drink? <br> IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less? | MUCH LESS ...... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE ........... 4 <br> NOTHING TO DRINK 5 <br> DON'T KNOW ..... 8 | MUCH LESS ..... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE ........... 4 <br> NOTHING TO DRINK 5 <br> DON'T KNOW ..... 8 | MUCH LESS ...... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE ........... 4 <br> NOTHING TO DRINK 5 <br> DON'T KNOW ..... 8 |
| 518 | When (NAME) had diarrhoea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? <br> IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less? | MUCH LESS ..... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE ............ 4 <br> STOPPED FOOD . 5 <br> NEVER GAVE FOOD 6 <br> DON'T KNOW ..... 8 | MUCH LESS ...... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE ............ 4 <br> STOPPED FOOD . 5 <br> NEVER GAVE FOOD 6 <br> DON'T KNOW ...... 8 | MUCH LESS ...... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE ........... 4 <br> STOPPED FOOD . 5 <br> NEVER GAVE FOOD 6 <br> DON'T KNOW ...... 8 |
| 519 | Did you seek advice or treatment for the diarrhoea from any source? | YES $\ldots \ldots \ldots \ldots \ldots$ NO . . . . . . . . . . . . (SKIP TO 524) |  | YES $\ldots \ldots \ldots \ldots \ldots$ NO . . . . . . . . . . . . (SKIP TO 524) |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH NAME $\qquad$ | SECOND-FROM-LAST <br> BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 520 | Where did you seek advice or treatment? <br> IF SOURCE IS A HOSPITAL, HEALTH CENTER, OR CLINIC, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> (NAME OF PLACE) <br> Anywhere else? <br> RECORD ALL PLACES MENTIONED. |  |  |  |
| 521 | CHECK 520: |  |  |  |
| 522 | Where did you first seek advice or treatment? <br> USE LETTER CODE FROM 520. | FIRST PLACE ... $\square$ | FIRST PLACE ... | FIRST PLACE ... $\square$ |
| 523 | How many days after the diarrhoea began did you first seek advice or treatment for (NAME)? <br> IF THE SAME DAY, RECORD '00'. | DAYS .... $\square$ | DAYS | DAYS ..... |
| 524 | Does (NAME) still have diarrhea? | YES $\ldots \ldots \ldots \ldots$ $\ldots$ <br> NO . . . . . . . . . . . 2 <br> DON'T KNOW . . . . 8 | YES $\ldots \ldots \ldots \ldots$ $\ldots$ <br> NO . . . . . . . . . . . 2 <br> DON'T KNOW . . . . 8 | YES . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . 2 <br> DON'T KNOW . . . 8 |
| 525 | Was he/she given any of the following to drink at any time since he/she started having the diarrhea: <br> A fluid made from a special packet called ORS <br> Sugar-Salt-Solution (SSS) |  YES NO DK  <br> ORS PKT 1 2 8 <br> SSS 1 2 8 |  YES NO DK  <br> ORS PKT 1 2 8 <br> SSS 1 2 8 |  YES NO DK  <br> ORS PKT 1 2 8 <br> SSS 1 2 8 |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 526 | Was anything (else) given to treat the diarrhea? |  | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 530)  <br> DON'T KNOW . . . . 8 | YES $\ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots$ $\ldots$  <br> (SKIP TO 530)   <br> DON'T KNOW $\ldots \ldots$ 8  |
| 527 | What (else) was given to treat the diarrhea? <br> Anything else? <br> RECORD ALL TREATMENTS GIVEN. |  |  |  |
| 528 | CHECK 527: <br> GIVEN VITAMIN A? |  |  |  |
| 529 | How many times was (NAME) given vitamin A? | TIMES $\square$ DON'T KNOW $\qquad$ | TIMES $\square$ DON'T KNOW $\qquad$ | TIMES $\square$ DON'T KNOW 98 |
| 530 | Has (NAME) been ill with a fever at any time in the last two weeks? | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO . . . . . . . . . . . . 2 <br> DON'T KNOW . . . . 8 |  | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO . . . . . . . . . . . . 2 <br> DON'T KNOW . . . . 8 |
| 531 | Has (NAME) had an illness with a cough at any time in the last two weeks? |  | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ 2 <br> (SKIP TO 534) . <br> DON'T KNOW . . . . 8 | YES $\ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots$ $\ldots$  <br> (SKIP TO 534)   <br> DON'T KNOW $\ldots \ldots$ 8  |
| 532 | When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing? | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots$ $\ldots$ <br> (SKIP TO 535$)$ 2 <br> DON'T KNOW . . . . . 8 |  | YES $\ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots$ $\ldots$  <br> (SKIP TO 535)  1 <br> DON'T KNOW $\ldots .$. 8  |
| 533 | When (NAME) had this illness, did he/she have a problem in the chest or a blocked or runny nose? |  |  |  |
| 534 | CHECK 530: <br> HAD FEVER? |  |  |  |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 535 | Now I would like to know how much (NAME) was given to drink during the illness with a (fever/cough). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? <br> IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less? | MUCH LESS . .... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE .............. 4 <br> NOTHING TO DRINK 5 <br> DON'T KNOW $\qquad$ | MUCH LESS ..... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE .............. 4 <br> NOTHING TO DRINK 5 <br> DON'T KNOW $\qquad$ | MUCH LESS $\ldots .$. 1 <br> SOMEWHAT LESS . . 2  <br> ABOUT THE SAME . 3  <br> MORE ............ 4  <br> NOTHING TO DRINK 5  <br> DON'T KNOW ..... 8  |
| 536 | When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? <br> IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less? | MUCH LESS ...... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE ........... 4 <br> STOPPED FOOD . 5 <br> NEVER GAVE FOOD 6 <br> DON'T KNOW ...... 8 | MUCH LESS ...... 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE ............ 4 <br> STOPPED FOOD . 5 <br> NEVER GAVE FOOD 6 <br> DON'T KNOW ..... 8 | MUCH LESS . . . . 1 <br> SOMEWHAT LESS . 2 <br> ABOUT THE SAME . 3 <br> MORE . . . . . . . . 4 <br> STOPPED FOOD . 5 <br> NEVER GAVE FOOD 6 <br> DON'T KNOW ..... 8 |
| 537 | Did you seek advice or treatment for the illness from any source? | YES $\ldots \ldots \ldots \ldots \ldots$ NO . . . . . . . . . . . (SKIP TO 542) | YES $\ldots \ldots \ldots \ldots \ldots$ NO . . . . . . . . . . . . (SKIP TO 542) (S. | YES $\ldots \ldots \ldots \ldots \ldots$ NO . . . . . . . . . . . (SKIP TO 542) (S. |
| 538 | Where did you seek advice or treatment? <br> Anywhere else? <br> RECORD ALL SOURCES MENTIONED. | PUBLIC SECTOR <br> GOVT HOSPITAL A GOVT HEALTH CENTER ..... B PHU/CLINIC ... C MOBILE CLINIC . D RHM/CBD ..... E OTHER PUBLIC $\qquad$ F <br> (SPECIFY) <br> PRIVATE SECTOR <br> PVT. HOSPITAL/ CLINIC......... G PHARMACY PVT DOCTOR $\square$ MOBILE CLINIC OTHER PRIVATE $\qquad$ | PUBLIC SECTOR <br> GOVT HOSPITAL <br> GOVT HEALTH CENTER PHU/CLINIC MOBILE CLINIC RHM/CBD OTHER PUBLIC $\qquad$ F <br> (SPECIFY) <br> PRIVATE SECTOR <br> PVT. HOSPITAL/ CLINIC......... G <br> PHARMACY $\square$ H PVT DOCTOR MOBILE CLINIC OTHER PRIVATE $\qquad$ | PUBLIC SECTOR <br> GOVT HOSPITAL <br> GOVT HEALTH CENTER <br> PHU/CLINIC ... C <br> MOBILE CLINIC . D <br> RHM/CBD ..... E <br> OTHER PUBLIC $\qquad$ F <br> (SPECIFY) <br> PRIVATE SECTOR <br> PVT. HOSPITAL/ CLINIC........ G <br> PHARMACY <br> PVT DOCTOR . MOBILE CLINIC OTHER PRIVATE $\qquad$ |
|  |  | MISSION HOSPITAL. . . . . . . L CLINIC . . . . . . . . . M OTHER MISSION N (SPECIFY) | MISSION HOSPITAL. . . . . . . L CLINIC . . . . . . . . . M OTHER MISSION N (SPECIFY) | MISSION HOSPITAL. . . . . . . L CLINIC . . . . . . . . . M OTHER MISSION N (SPECIFY) |
|  |  | NGO $\qquad$ P <br> OTHER SOURCE SHOP ........... Q TRADITIONAL HEALER $\qquad$ | NGO .............. P <br> OTHER SOURCE <br> SHOP ........... Q <br> TRADITIONAL HEALER | NGO P <br> OTHER SOURCE <br> SHOP ........... Q TRADITIONAL HEALER |
|  |  | OTHER ${\underset{\text { (SPECIFY) }}{ }}$ | OTHER ${\underset{\text { (SPECIFY) }}{ }}^{X}$ | OTHER ${\underset{\text { (SPECIFY) }}{ }}^{X}$ |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME $\qquad$ | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ | SECOND-FROM-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: | :---: |
| 539 | CHECK 538: |  |  | TWO OR ONLY |
| 540 | Where did you first seek advice or treatment? <br> USE LETTER CODE FROM 538. | FIRST PLACE ... $\square$ | FIRST PLACE ... | FIRST PLACE . . $\square$ |
| 541 | How many days after the illness began did you first seek advice or treatment for (NAME)? <br> IF THE SAME DAY, RECORD '00'. | DAYS .... $\square$ | DAYS .... $\square$ | DAYS ..... |
| 542 | Is (NAME) still sick with a (fever/ cough)? |  | YES . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . 2 <br> DON'T KNOW . . . 8 | YES $\ldots \ldots \ldots . . .$. 1 <br> NO . . . . . . . . . . . 2 <br> DON'T KNOW . . . 8 |
| 543 | At any time during the illness, did (NAME) take any drugs for the illness? |  |  |  |
| 544 | What drugs did (NAME) take? <br> Any other drugs? <br> RECORD ALL MENTIONED. |  | ANTIMALARIAL DRUGS SP/FANSIDAR..... A CHLOROQUINE ... QUININE OTHER ANTIMALARIAL <br> ANTIBIOTIC COTRIMOXAZOLE AMOXYCILLIN PEN VK ERITHROMYCIN . <br> OTHER DRUGS PANADOL PHENERGAN OTHER $\qquad$ (SPECIFY) DON'T KNOW $\qquad$ | ANTIMALARIAL DRUGS <br> SP/FANSIDAR..... A CHLOROQUINE ... B QUININE OTHER ANTIMALARIAL <br> ANTIBIOTIC COTRIMOXAZOLE AMOXYCILLIN PEN VK ERITHROMYCIN ... H <br> OTHER DRUGS PANADOL ...... I PHENERGAN OTHER $\qquad$ (SPECIFY) DON'T KNOW $\qquad$ |
| 544A | CHECK 544: <br> ANY CODE A-H CIRCLED? |  |  |  |
| 545 | Did you already have (NAME OF DRUG FROM 544) at home when the child became ill? <br> IF YES, CIRCLE CODE FOR THAT DRUG. <br> ASK SEPARATELY FOR EACH ANTIMALARIAL OR ANTIBIOTIC DRUG GIVEN IN 544. | ANTIMALARIAL DRUGS SP/FANSIDAR... A CHLOROQUINE . B QUININE ......... C OTHER ANTI- <br> MALARIAL ... D <br> ANTIBIOTIC <br> COTRIMOXAZOLE E <br> AMOXCYCILIN .. F <br> PEN VK ......... G <br> ERITHROMYCIN .. H <br> NO DRUG AT HOME Y | ANTIMALARIAL DRUGS <br> SP/FANSIDAR... A <br> CHLOROQUINE . B <br> QUININE ......... C <br> OTHER ANTI- <br> MALARIAL ... D <br> ANTIBIOTIC <br> COTRIMOXAZOLE E <br> AMOXCYCILIN .. F <br> PEN VK ......... G <br> ERITHROMYCIN . . H <br> NO DRUG AT HOME Y | ANTIMALARIAL DRUGS <br> SP/FANSIDAR... A <br> CHLOROQUINE . B <br> QUININE ......... C <br> OTHER ANTI- <br> MALARIAL ... D <br> ANTIBIOTIC COTRIMOXAZOLE E AMOXCYCILIN .. F PEN VK ......... G ERITHROMYCIN .. H |
| 546 |  | GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547. | GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547. | GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 547. |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 547 | CHECK 215 AND 218, ALL ROWS: <br> NUMBER OF CHILDREN BORN IN 2001 OR LATER LIVING WITH <br> ONE OR MORE <br> NONE | E RESPONDENT $\square$ | $\rightarrow 550$ |
| 548 | The last time (NAME OF YOUNGEST CHILD) passed stools, what was done to dispose of the stools? |  |  |
| 549 | CHECK 525(a) AND 525(b), ALL COLUMNS: <br> NO CHILD <br> ANY C <br> RECEIVED FLUID RECEI FROM ORS PACKET | ILD <br> ED FLUID $\square$ RS PACKET | $\rightarrow 552$ |
| 550 | Have you ever heard of a special product called ORS that you can get for the treatment of diarrhoea? | YES $\ldots$. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 NO . . . . . . . . . . . . . |  |
| 552 | CHECK 215 AND 218 IN ALL ROWS: <br> HAS AT LEAST ONE CHILD <br> DOES NOT BORN IN 2003 OR LATER AND LIVING WITH HER <br> RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE WITH 553) <br> (NAME) | AVE ANY CHILDREN N IN 2003 OR LATER $\square$ D LIVING WITH HER | $\rightarrow 601$ |
| 553 | Now I would like to ask you about liquids or foods (NAME FROM 552) had yesterday during the day or at night. <br> Did (NAME FROM 552) (drink/eat): <br> Plain water? <br> Commercially produced infant formula? <br> Any baby food, e.g., Cerelac, ligugu? <br> Any (other) porridge or gruel? |   YES NO DK <br> PLAIN WATER $\quad \ldots \ldots \ldots .$. 1 2 8  <br> FORMULA $\ldots \ldots \ldots \ldots .$. 1 2 8  <br> BABY CEREAL $\ldots \ldots . .$. 1 2 8  <br> OTHER PORRIDGE/GRUEL. . 1 2 8   |  |

Now I would like to ask you about (other) liquids or foods that (NAME FROM 552) or you may have had yesterday during the day or at night. I am interested in whether your child or you had the item even if it was combined with other foods.

Did (NAME FROM 552)/you drink (eat):
a. Milk such as tinned, powdered, or fresh animal milk?
b. Tea or coffee?
c. Sugary drinks such as sodas or fruit juices?
d. Any other liquids?
e. Bread, rice, noodles, maize meal, or other foods made from grains?
f. Pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside?
g. White potatoes, white yams, taro (emathapha), cassava, or any other foods made from roots?
h. Any dark green, leafy vegetables? (such as cassava leaves, spinach, ocra, blackjack and pumkin leaves)
i. Ripe mangoes, paw paw, oranges or guavas?
j. Any other fruits or vegetables?
k. Liver, kidney, heart or other organ meats (such as tripe, offals and tongue)?
I. Beef, pork, lamb, goat, rabbit or impala?
m. Chicken, duck, turkey or other birds?
n. Eggs?
o. Fresh or dried fish or shellfish?
p. Any foods made from beans, peas, or lentils?
q. Any nuts?
r. Cheese, sour milk, yogurt or other milk products?
s. Any oil, fats, or butter, or foods made with any of these?
t. Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits?
u. Any other solid or semi-solid food?

|  | CHILD | MOTHER |
| :---: | :---: | :---: |
|  | YES NO DK | YES NO DK |
| a | 128 | 128 |
| b | 1 2 8 | 128 |
| c | 128 | 128 |
| d | 128 | 128 |
| e | 128 | 128 |
| f | 128 | 128 |
| 9 | 128 | 128 |
| h | 128 | 128 |
| i | 128 | 128 |
| j | 128 | 128 |
| k | 128 | 128 |
| 1 | 128 | 12 |
| m | 128 | 128 |
| n | 128 | 128 |
| 0 | 128 | 128 |
| p | 128 | 128 |
| 9 | 12 | 128 |
| r | 1 2-8 | 1 2----- |
| s | 128 | 128 |
| t | 1 2-8 | 128 |
| -_u | 128 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 601 | Are you in a civil or traditional marriage or both civil and traditiona marriage? |  | $\rightarrow$ 601B |
| 601A | Was dowry/labola paid? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 NO . . . . . . . . . . . | $\longrightarrow 605$ |
| 601B | Are you living with a man as if married? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 605$ |
| 602 | Have you ever been married or lived together with a man as if married? |  | $\longrightarrow 619$ |
| 604 | What is your marital status now: are you widowed, divorced, or separated? | WIDOWED . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> DIVORCED . . . . . . . . . . . . . . . . . . 3 |  |
| 605 | Is your husband/partner living with you now or is he staying elsewhere? | LIVING WITH HER . . . . . . . . . . . . . . . . . . 1 STAYING ELSEWHERE . . . . . . . |  |
| 606 | RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. | NAME <br> LINE NO. |  |
| 607 | Besides yourself, does your husband/partner have other wives or does he live with other women as if married? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . . . . 8 DON'T KNOW . . . . . . . . | $\xrightarrow{\longrightarrow} 610$ |
| 608 | Including yourself, in total, how many wives or partners does your husband live with now as if married? | TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS |  |
| 609 | Are you the first, second, ... wife? |  |  |
| 610 | Have you been married or lived with a man only once or more than once? | ONLY ONCE . . . . . . . . . . . . . . . . . . . . 1 <br> MORE THAN ONCE 2  |  |
| 611 | CHECK 610: |  | $\longrightarrow 614$ |
| 612 | How old were you when you first started living with him? | AGE |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 614 | CHECK 604: IS RESPONDENT CURRENTLY WIDOWED? <br> NOT ASKED OR NOT WIDOWED $\square$ WIDOW | D $\square$ | $\rightarrow 617$ |
| 615 | CHECK 610: <br> MARRIED MORE THAN ONCE |  | $\rightarrow 619$ |
| 616 | How did your previous marriage or union end? | DEATH/WIDOWHOOD $\ldots . . . . . . . . .$. 1 <br> DIVORCE ........................ . . . . . 2 <br> SEPARATION . . . . . . . . . . . . . . . 3 | $\rightarrow 619$ |
| 617 | Who did most of your late husband's property go to? |  | $\longrightarrow 619$ |
| 618 | Did you receive any of your late husband's assets or valuables? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 |  |
| 619 | CHECK FOR THE PRESENCE OF OTHERS. <br> BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE P | VACY. |  |
| 620 | Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. <br> How old were you when you had sexual intercourse for the very first time? | NEVER HAD SEXUAL <br> INTERCOURSE ................. 00 <br> AGE IN YEARS $\square$ <br> FIRST TIME WHEN STARTED <br> LIVING WITH (FIRST) <br> HUSBAND/PARTNER .............. 95 |  |
| 621 | Do you intend to wait until you get married to have sexual intercourse for the first time? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 NO . . . . . . . . . 8 | 642 |
| 622 | CHECK 107:AGE $\square$ <br>  $15-24$$\square$ AGE <br> $25-49$ | $\square$ | $\rightarrow 627$ |
| 623 | The first time you had sexual intercourse, was a male condom or female condom used? | YES, MALE CONDOM . . . . . . . . . . . . . . 1 <br> YES, FEMALE CONDOM $\ldots \ldots \ldots \ldots$ 2 <br> NO . . . . . . . . . . . . . . . . . . 3 <br> DON'T KNOW/DON'T REMEMBER . . 8 | $\begin{aligned} & \square \rightarrow 624 \\ & \longrightarrow 624 \end{aligned}$ |
| 623A | What was the main reason you did not use a condom the first time you had sexual intercourse? |  |  |



|  |  | LAST SEXUAL PARTNER | SECOND-TO-LAST SEXUAL PARTNER | THIRD-TO-LAST SEXUAL PARTNER |
| :---: | :---: | :---: | :---: | :---: |
| 628 | When was the last time you had sexual intercourse with this person? |  | DAYS . 1    <br>      <br> WEEKS 2    <br>      <br>      <br>      | DAYS . 1 WEEKS MONTHS 3 |
| 629 | The last time you had sexual intercourse with this (second/third) person, was a male condom or a female condom used? | YES, MALE CONDOM. 1  <br> YES, FEMALE CON. . 2 <br> (SKIP TO 630) $\leftarrow$  <br> NO . . . . . . . . . . 3  | YES, MALE CONDOM. 1  <br> YES, FEMALE CON. . 2 <br> (SKIP TO 630)   <br> NO . . . . . . . . . .   | YES, MALE CONDOM. 1  <br> YES, FEMALE CON. . 2 <br> $($ SKIP TO 630$)$ $\longleftarrow$  <br> NO . . . . . . . . . . . 3  |
| 629A | What was the main reason you did not use a condom the last time you had sexual intercourse with this (second/third) person? |  |  |  |
| 630 | Was a male or a female condom used everytime you had sexual intercourse wth this person in the last 12 months? | YES $\ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots .$. 2 |  | YES $\ldots \ldots \ldots \ldots .$. NO $\ldots \ldots \ldots \ldots$ |
| 631 | What was your relationship to this person with whom you had sexual intercourse? <br> IF PARTNER: <br> Were you living together as if married? <br> IF YES, CIRCLE '02' <br> IF NO, CIRCLE '03' |  |  |  |
| 632 | For how long (have you had/did you have) a sexual relationship with this person? <br> IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS. | DAYS . 1 MONTHS 2 YEARS 3 | DAYS . 1 MONTHS 2 YEARS 3 | DAYS . 1 <br> MONTHS 2 <br> YEARS 3 |
| 633 | CHECK 107: |  |  |  |
| 634 | How old is this person? | AGE OF PARTNER $\square$ <br> (SKIP TO 637) <br> DON'T KNOW $\qquad$ | AGE OF PARTNER $\square$ (SKIP TO 637) DON'T KNOW $\qquad$ 98 | AGE OF PARTNER $\square$ (SKIP TO 637) DON'T KNOW $\qquad$ |
| 635 | Is this person older than you, younger than you, or about the same age? | OLDER $\ldots \ldots .$. 1  <br> YOUNGER $\ldots .$. 2 <br> SAME AGE $\ldots .$. 3 <br> DON'T KNOW $\ldots$ 8 <br> $($ SKIP TO 637$)$   |  | OLDER $\ldots \ldots$. 1 <br> YOUNGER $\ldots .$. 2 <br> SAME AGE ..... 3 <br> DON'T KNOW ... 8 <br> (SKIP TO 637)  |


|  |  | LAST SEXUAL PARTNER | SECOND-TO-LAST SEXUAL PARTNER | THIRD-TO-LAST SEXUAL PARTNER |
| :---: | :---: | :---: | :---: | :---: |
| 636 | Would you say this person is ten or more years older than you or less than ten years older than you? | TEN OR MORE <br> YEARS OLDER 1 LESS THAN TEN YEARS OLDER OLDER, UNSURE HOW MUCH $\qquad$ | $\left.\begin{array}{l} \text { TEN OR MORE } \\ \text { YEARS OLDER } \\ \text { LESS THAN TEN } \\ \text { YEARS OLDER } \end{array}\right) .2$ | $\begin{aligned} & \text { TEN OR MORE } \\ & \text { YEARS OLDER } \\ & \text { LESS THAN TEN } \\ & \text { YEARS OLDER } \\ & \text { OLDER, UNSURE } \\ & \text { HOW MUCH } \end{aligned}$ |
| 637 | The last time you had sexual intercourse with this person, did you or this person take alcohol or other intoxicating substances? |   YES NO <br> ALCOHOL $\ldots$ 1 2 <br> OTHER $\ldots .$. 1 2 |   YES NO <br> ALCOHOL $\ldots$ 1 2 <br> OTHER $\ldots .$. 1 2 |   YES NO <br> ALCOHOL $\ldots$ 1 2 <br> OTHER $\ldots .$. 1 2 |
| 637A | CHECK 637: | $\begin{array}{cc}\text { ANY } & \text { ALL } \\ \text { YES } & \text { NO } \\ \square & \square \\ \square & \text { (SKIP TO 639) }\end{array}$ | $\begin{array}{ccc}\text { ANY } & \text { ALL } \\ \text { YES } & \text { NO } \\ \square & \square \\ \square & \text { (SKIP TO 639) }\end{array}$ |  |
| 638 | Were you or your partner drunk at that time? <br> IF YES: Who was drunk? | RESPONDENT ONLY 1 <br> PARTNER ONLY .... 2 <br> RESPONDENT AND  <br> PARTNER BOTH . 3 <br> NEITHER . . . . . . . . 4 | RESPONDENT ONLY 1 <br> PARTNER ONLY .... 2 <br> RESPONDENT AND  <br> PARTNER BOTH . 3 <br> NEITHER . . . . . . . . . 4 | RESPONDENT ONLY 1 <br> PARTNER ONLY .... 2 <br> RESPONDENT AND  <br> PARTNER BOTH . 3 <br> NEITHER . . . . . . . . 4 |
| 639 | Apart from [this person/these two people], have you had sexual intercourse with any other person in the last 12 months? |  |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 640 | In total, with how many different people have you had sexual intercourse in the last 12 months? <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. <br> IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.' | NUMBER OF PARTNERS LAST 12 MONTHS $\qquad$ $\square$ <br> DON'T KNOW |  |
| 641 | In total, with how many different people have you had sexual intercourse in your lifetime? <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. <br> IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.' | NUMBER OF PARTNERS <br> IN LIFETIME <br> . . . . . . . . . <br> DON'T KNOW <br> 98 |  |
| 641A | CHECK 301 (07): <br> HAS HEARD OF MALE CONDOM | HAS NOT HEARD OF MALE CONDOM $\square$ | $\rightarrow 645$ |
| 642 | Do you know of a place where a person can get male condoms? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $\rightarrow 645$ |
| 643 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> WRITE THE NAME OF THE PLACE. |  |  |
| 644 | If you wanted to, could you yourself get a male condom? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 NO . . . . . . . . . |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 645 | CHECK 301 (08): HAS HEARD OF FEMALE CONDOM $\quad \square \quad$ HAS NOT HEARD | $\square$ | $\rightarrow 701$ |
| 645A | Do you know of a place where a person can get female condoms? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $\rightarrow 701$ |
| 646 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL . . . . . . . . A <br> GOVT. HEALTH CENTER .......... B <br> PHU/CLINIC ........................ C <br> MOBILE CLINIC . . . . . . . . . . . . . . . . D <br> RHM/CBD .......................... E <br> OTHER PUBLIC $\qquad$ F (SPECIFY) <br> PRIVATE SECTOR <br> PRIVATE HOSPITAL/CLINIC ..... G PHARMACY. <br> PRIVATE DOCTOR $\qquad$ <br> MOBILE CLINIC . . . . . . . . . ........ . J <br> CBD ................................... K <br> OTHER PRIVATE $\qquad$ |  |
| 647 | If you wanted to, could you yourself get a female condom? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . 8 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 701 | CHECK 311/311A: |  | $\rightarrow 713$ |
| 702 | CHECK 226: | HAVE (A/ANOTHER) CHILD $\ldots \ldots .$. 1  <br> NO MORE/NONE $\ldots \ldots \ldots \ldots \ldots$. 2  <br> SAYS SHE CAN'T GET PREGNANT . 3 <br> UNDECIDED/DON'T KNOW:   <br> AND PREGNANT . . . . . . . . . . . . . . . 4  <br> AND NOT PREGNANT   <br> OR UNSURE . . . . . . . . . . . . . . . . 5  | $\begin{array}{r} \longrightarrow 704 \\ \longrightarrow 713 \\ \longrightarrow 709 \\ \longrightarrow 708 \end{array}$ |
| 703 | CHECK 226: <br> NOT PREGNANT <br> PREGNANT OR UNSURE <br> How long would you like to wait <br> After the birth of the child you from now before the birth of are expecting now, how long (a/another) child? would you like to wait before the birth of another child? |  |  |
| 704 | CHECK 226: <br> NOT PREGNANT <br> PREGNANT OR UNSURE |  | $\rightarrow 709$ |
| 705 | CHECK 310: USING A CONTRACEPTIVE METHOD? |  | $\rightarrow 713$ |
| 706 | CHECK 703: <br> NOT <br> 24 OR MORE MONTHS <br> ASKED OR 02 OR MORE YEARS | 23 MONTHS 00-01 YEAR $\square$ | $\rightarrow 709$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 707 | CHECK 702: |  |  |
| 708 | CHECK 310: USING A CONTRACEPTIVE METHOD? <br> NOT <br> ASKED NOT CURRENTLY USING $\square$ CUR | YES, NTLY USING | $\rightarrow 713$ |
| 709 | Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 | $\xrightarrow{\longrightarrow} 711$ |
| 710 | Which contraceptive method would you prefer to use? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 711 | What is the main reason that you think you will not use a contraceptive method at any time in the future? <br> CIRCLE ONLY ONE CODE. | NOT MARRIED |  |
| 712 | Would you ever use a contraceptive method if you were married? |  |  |
| 713 | CHECK 216: <br> HAS LIVING CHILDREN NO LIVING CHILDREN <br> If you could go back to the time <br> If you could choose exactly the you did not have any children and could choose exactly the your whole life, how many number of children to have in would that be? your whole life, how many would that be? <br> PROBE FOR A NUMERIC RESPONSE. |  | $\longrightarrow 715$ $\longrightarrow 715$ |
| 714 | How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter? |  |  |
| 715 | In the last six months have you heard or seen about family planning: <br> On the radio? <br> On the television? <br> In a newspaper or magazine? |   YES NO <br> RADIO . . . . . . . . . . . . . . . . . 1 2 <br> TELEVISION ............... 1 2 <br> NEWSPAPER OR MAGAZINE ... 1 2 |  |
| 716 | In the last six months have you heard or seen any writing about family planning in: <br> Billboards? <br> Posters? <br> Pamphlets? <br> T-shirts? <br> Other? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 716A | In the last six months, have you discussed the practice of family planning with your friends, neighbors, or relatives? |  | $\longrightarrow 717$ |
| 716B | With whom? <br> Anyone else? <br> RECORD ALL PERSONS MENTIONED. |  |  |
| 717 | CHECK 601, 601B, 604: |  | $\rightarrow 801$ |
| 718 | CHECK 311/311A: <br> NEITHER CODE <br> B, G, NOR M CIRCLED, BUT SOME OTHER <br> CODE(S) <br> CIRCLED <br> CODE B, G, OR M <br> CIRCLED $\square$ <br> NO CODE CIRCLED $\square$ |  | $\begin{array}{\|l} \longrightarrow \\ \\ \longrightarrow \\ \\ \\ \end{array} 220$ |
| 719 | Does your husband/partner know that you are using a method of family planning? | YES $\ldots \ldots \ldots \ldots \ldots \ldots$  <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 <br> DON'T KNOW . . . . . . . . .  | $\xrightarrow{\longrightarrow} 721$ |
| 720 | Would you say that using contraception is mainly your decision, mainly your husband's/partner's decision, or did you both decide together? |  |  |
| 721 | CHECK 311/311A: |  | $\rightarrow 801$ |
| 722 | Do you think your husband/partner wants the same number of children that you want, or does he want more or fewer than you want? |  |  |

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 811 | What is your occupation, that is, what kind of work do you mainly do? | $\qquad$ |  |
| 812 | CHECK 811: <br> WORKS IN <br> DOES NOT WORK <br> AGRICULTURE IN AGRICULTURE |  | $\rightarrow 814$ |
| 813 | Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land? | OWN LAND . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> FAMILY LAND . . . . . . . . . . . . . 2 <br> RENTED LAND . . . . . . . . . . . 4 |  |
| 814 | Do you do this work for a member of your family, for someone else, or are you self-employed? | FOR FAMILY MEMBER $\ldots \ldots \ldots \ldots$ 1 <br> FOR SOMEONE ELSE $\ldots \ldots \ldots \ldots$ 2 <br> SELF-EMPLOYED $\ldots \ldots . . . .$. 3 |  |
| 815 | Do you usually work at home or away from home? | HOME . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 AWAY . . . . . . . . . . . . . |  |
| 816 | Do you usually work throughout the year, or do you work seasonally, or only once in a while? | $\begin{array}{lll}\text { THROUGHOUT THE YEAR . . . . . . . . . . } & 1 \\ \text { SEASONALLY/PART OF THE YEAR . . } & 2 \\ \text { ONCE IN A WHILE .................... } & 3\end{array}$ |  |
| 817 | Are you paid in cash or kind for this work or are you not paid at all? |  |  |
| 818 | CHECK 601: <br> CURRENTLY <br> MARRIED/LIVING <br> NOT IN UNION <br> WITH A MAN $\square$ |  | $\rightarrow 824$ |
| 819 | CHECK 817: <br> CODE 1 OR 2 <br> CIRCLED <br> OTHER $\square$ |  | $\rightarrow 822$ |
| 820 | Who decides how the money you earn will be used: mainly you, mainly your husband/partner, or you and your husband/partner jointly? |  |  |
| 821 | Would you say that the money that you earn is more than what your husband/partner earns, less than what he earns, or about the same? |  | $\longrightarrow 823$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 822 | Who decides how your husband's/partner's earnings will be used: mainly you, mainly your husband/partner, or you and your husband/partner jointly? | RES | DENT D/PARTNER DENT AND AND/PARTNER D/PARTNER DO IN ANY MONE <br> (SPECIFY) |  | $\begin{array}{r} 1 \\ -\quad 2 \\ 3 \\ \\ \hline 4 \\ -\quad 6 \end{array}$ |  |
| 823 | Who usually makes decisions about health care for yourself: mainly you, mainly your husband/partner, you and your husband/partner jointly, or someone else? <br> Who usually makes decisions about making major household purchases? <br> Who usually makes decisions about making purchases for daily household needs? <br> Who usually makes decisions about visits to your family or relatives? | RES <br> HUS <br> RES <br> SOM <br> OTH <br> 1 <br> 1 <br> 1 | $\begin{aligned} & \text { ENT = } 1 \\ & \text { PARTNER }=2 \\ & \text { ENT \& HUSBAND/PA } \\ & \text { ELSE }=4 \\ & 2 \\ & 2 \end{aligned}$ | JOINTL <br> 4 <br> 4 <br> 4 <br> 4 | $=3$ <br> 6 <br> 6 <br> 6 <br> 6 |  |
| 824 | PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT) |  | $\mathrm{E}<10$ <br> D <br> MALES <br> EMALES | PRES./ <br> NOT <br> ISTEN <br> 2 <br> 2 <br> 2 <br> 2 | NOT PRES. $\begin{aligned} & 3 \\ & 3 \\ & 3 \\ & 3 \end{aligned}$ |  |
| 825 | Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations: <br> If she goes out without telling him? <br> If she neglects the children? <br> If she argues with him? <br> If she refuses to have sex with him? <br> If she burns the food? <br> If she has sex with other men? | GOE NEG ARG REF BUR SEX | JT HILDREN <br> SEX <br> OOD <br> H OTHER MEN | NO 2 2 2 2 2 2 | $\begin{array}{r} \text { DK } \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \end{array}$ |  |

SECTION 9. HIVIAIDS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 901 | Now I would like to talk about something else. Have you ever heard of an illness called AIDS? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . 2 | $\longrightarrow 942$ |
| 902 | Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other partners? |  |  |
| 903 | Can people get the AIDS virus from mosquito bites? |  |  |
| 904 | Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex? |  |  |
| 905 | Can people get the AIDS virus by sharing food with a person who has AIDS? |  |  |
| 906 | Can people reduce their chance of getting the AIDS virus by abstaining from sexual intercourse? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$  <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> DON'T KNOW . . . . . . . . . . . . . . 8 |  |
| 907 | Can people get the AIDS virus because of witchcraft or other supernatural means? |  |  |
| 907A | Can people get the AIDS virus from having anal sex? |  |  |
| 907B | Can people get the AIDS virus from having oral sex? |  |  |
| 907C | Can people get the AIDS virus from open wounds or sores of an infected person? |  |  |
| 908 | Is there anything else a person can do to avoid or reduce the chances of getting the AIDS virus? |  | $\xrightarrow{\longrightarrow} 910$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 909 | What can a person do? <br> Anything else? <br> RECORD ALL WAYS MENTIONED. |  |  |
| 910 | Is it possible for a healthy-looking person to have the AIDS virus? |  |  |
| 911 | Can the virus that causes AIDS be transmitted from a mother to her baby: <br> During pregnancy? <br> During delivery? <br> By breastfeeding? |  YES NO DK <br> DURING PREG. ..... 1 2 8 <br> DURING DELIVERY ... 1 2 8 <br> BREASTFEEDING $\ldots$. 1 2 8 |  |
| 912 | CHECK 911: <br> AT LEAST <br> ONE 'YES' | R | $\rightarrow 914$ |
| 913 | Is there any special drug that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby? |  |  |
| 914 | Have you heard about special antiretorviral drugs (ARV) that people infected with the AIDS virus can get from a doctor or a nurse to help them live longer? |  |  |
| 914A | CHECK FOR PRESENCE OF OTHERS. <br> BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PR |  |  |
| 915 | CHECK 208 AND 215: <br> LAST BIRTH SINCE <br> JANUARY 2003 | HS $\square$ <br> E <br> 03 $\square$ | $\begin{aligned} & \longrightarrow 924 \\ & \longrightarrow 924 \end{aligned}$ |
| 916 | CHECK 404 AND 407 FOR LAST BIRTH: <br> HAD <br> ANTENATAL <br> NAME: $\qquad$ | NO | $\longrightarrow 924$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 917 | During any of the antenatal visits for (NAME OF LAST BIRTH), did anyone talk to you about: <br> Babies getting the AIDS virus from their mother? <br> Things that you can do to prevent getting the AIDS virus? Getting tested for the AIDS virus? |  YES NO DK <br> AIDS FROM MOTHER 1 2 8 <br> THINGS TO DO 1 2 8 <br> TESTED FOR AIDS . 1 2 8 |  |
| 918 | Were you advised to have a test for the AIDS virus as part of your antenatal care? |  |  |
| 919 | I don't want to know the results, but were you tested for the AIDS virus as part of your antenatal care? |  | $\longrightarrow 924$ |
| 920 | I don't want to know the results, but did you get the results of the test? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . 2 |  |
| 921 | Where did you go to take the test? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER, VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. |  |  |
| 922 | Have you been tested for the AIDS virus since that time you were tested during your pregnancy? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . 2 | $\rightarrow 925$ |
| 923 | When was the last time you were tested for the AIDS virus? | LESS THAN 12 MONTHS AGO $\ldots .$. 1 <br> $12-23$ MONTHS AGO .............. 2  <br> 2 OR MORE YEARS AGO . . . . . . 3  | 931 |
| 924 | I don't want to know the results, but have you ever been tested to see if you have the AIDS virus? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . 2 | $\longrightarrow 929$ |
| 925 | When was the last time you were tested? | LESS THAN 12 MONTHS AGO $\ldots .$. 1 <br> $12-23$ MONTHS AGO .............. 2  <br> 2 OR MORE YEARS AGO $\ldots . . .$. 3  |  |
| 926 | The last time you had the test, did you yourself ask for the test or were you advised to have the test, or was it required? | ASKED FOR THE TEST $\ldots \ldots . . . .$. 1 <br> ADVISED . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3  <br> REQUIRED . . . . . . . . .  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 927 | I don't want to know the results, but did you get the results of the test? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad 1$ NO . . . . . . . . . . . 2 | 928 |
| 927A | How long after the test did you get the result? | SAME DAY . . . . . . . . . . . . . . . . . . . . . . . 1 <br> WITHIN A WEEK . . . . . . . . . . . . . . . 2 <br> WITHIN A MONTH . . . . . . . . . . 4 |  |
| 928 | Where did you go to take the test? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> WRITE THE NAME OF THE PLACE. |  | $\rightarrow 931$ |
| 929 | Do you know of a place where people can go to get tested for the AIDS virus? | $\begin{aligned} & \text { YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } \quad 1 \\ & \text { NO . . . . . . . . . . . . . . . . . . . } 2 \end{aligned}$ | $\rightarrow 931$ |
| 930 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 931 | Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$  <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> DON'T KNOW . . . . . . . . . . . . . . . 8 |  |
| 932 | If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not? |  |  |
| 933 | If a member of your family became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household? |  |  |
| 934 | In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school? | SHOULD BE ALLOWED . ............ 1 <br> SHOULD NOT BE ALLOWED . . . . . . 2 <br> DK/NOT SURE/DEPENDS . . . . . . 8 |  |
| 935 | Do you personally know someone who has been denied health services in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? |  | $\longrightarrow 940$ |
| 935A | Do you personally know someone who has been fired or sacked from work because he or she is suspected to have the AIDS virus or has the AIDS virus? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad 1$ NO . . . . . . . . . . . . . . |  |
| 936 | Do you personally know someone who has been denied involvement in social events, religious services, or community events in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? |  |  |
| 937 | Do you personally know someone who has been verbally abused or teased in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? |  |  |
| 938 | CHECK 935, 936, AND 937: <br> OTHER | $\begin{aligned} & \text { ST } \\ & \text { ES' } \\ & \hline \end{aligned}$ | $\rightarrow 940$ |
| 939 | Do you personally know someone who is suspected to have the AIDS virus or who has the AIDS virus? | YES ...................................... . . . . . . . . 1 NO . . . . . . . . . . . . 2 |  |
| 940 | Do you agree or disagree with the following statement: People with the AIDS virus should be ashamed of themselves. |  |  |
| 941 | Do you agree or disagree with the following statement: People with the AIDS virus should be blamed for bringing the disease into the community. |  |  |
| 942 | Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when she knows he has a disease that can be transmitted through sexual contact? |  |  |
| 943 | When a wife knows her husband has a disease that can be transmitted through sexual contact, is she justified in asking that they use a condom when they have sex? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ $\ldots$ <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 <br> DON'T KNOW . . . . . . . . . . . . 8 |  |
| 944 | Is a wife justified in refusing to have sex with her husband when she is tired or not in the mood? |  |  |
| 945 | Is a wife justified in refusing to have sex with her husband when she is feeling unwell? |  |  |
| 946 | Is a wife justified in refusing to have sex with her husband when she has recently given birth? |  |  |
| 947 | Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with women other than his wives? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 948 | Should children age 12-14 be taught about using a condom to avoid AIDS? |  |  |
| 949 | Should children age 12-14 be taught to wait until they get married to have sexual intercourse in order to avoid AIDS? |  |  |
| 950 | Should condoms be available in secondary school? |  |  |
| 951 | CHECK 601: <br> CURRENTLY MARRIED/ LIVING WITH A PARTNER NOT IN UNION |  | $\rightarrow 954$ |
| 952 | Can you say no to your husband/partner if you do not want to have sexual intercourse? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$  <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> DEPENDS/NOT SURE . . . . . . . . 2 |  |
| 953 | Could you ask your husband/partner to use a condom if you wanted him to? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$  <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 <br> DEPENDS/NOT SURE . . . . . . . . . . 8 |  |
| 954 | Do you believe that young men should wait until they are married to have sexual intercourse? |  |  |
| 955 | Do you think that most young men you know wait until they are married to have sexual intercourse? |  |  |
| 956 | Do you believe that men who are not married and are having sex should only have sex with one partner? |  |  |
| 957 | Do you think that most men you know who are not married and are having sex, have sex with only one partner? |  |  |
| 958 | Do you believe that married men should only have sex with their wives? |  |  |
| 959 | Do you think that most married men you know have sex only with their wives? |  |  |
| 960 | Do you believe that young women should wait until they are married to have sexual intercourse? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ $\ldots$ <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> DK/NOT SURE/DEPENDS . . . . . 8 |  |
| 961 | Do you think that most young women you know wait until they are married to have sexual intercourse? |  |  |
| 962 | Do you believe that women who are not married and are having sex should only have sex with one partner? |  |  |
| 963 | Do you think that most women you know who are not married and are having sex, have sex with only one partner? |  |  |
| 964 | Do you believe that married women should only have sex with their husbands? |  |  |
| 965 | Do you think that most married women you know have sex only with their husbands? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1001 |  | YES . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad 1$ NO . .................................. $\quad 2$ | $\rightarrow 1004$ |
| 1002 | If a man has a sexually transmitted disease, what signs or symptoms might he have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |
| 1003 | If a woman has a sexually transmitted disease, what signs or symptoms might she have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |
| 1004 |  |  | $\rightarrow 1101$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 1005 | CHECK 1001:HEARD ABOUT INFECTION <br> TRANSMITTED THROUGH <br> SEXUAL CONTACT$\square$HAS NOT HEARD ABOUT <br> INFECTION TRANSMITTED <br> THROUGH SEXUAL CONTACT |  |  | $\rightarrow 1007$ |
| 1005A |  |  |  |  |
| 1006 | Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact? | YES . . . . . . . . . . . . . . . . . . . NO . . . . . . . . . . . . | 8 |  |
| 1007 | Sometimes women experience a bad smelling abnormal genital discharge. <br> During the last 12 months, have you had a bad smelling abnormal genital discharge? | YES <br> NO <br> DON'T KNOW | 1 2 8 |  |
| 1008 | Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer? | YES <br> NO <br> DON'T KNOW | 8 |  |
| 1009 |  <br> HAS NOT HAD AN INFECTION OR DOES NOT KNOW |  |  | $\rightarrow 1101$ |
| 1010 | The last time you had (PROBLEM(S) FROM 1006/1007/1008), did you seek any kind of advice or treatment? | $\begin{aligned} & \text { YES. } \\ & \text { NO } . \end{aligned}$ | 2 | $\rightarrow 1012$ |
| 1011 | Where did you go? <br> Any other place? <br> RECORD ALL SOURCES MENTIONED. <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> WRITE THE NAME OF THE PLACE. | PUBLIC SECTOR <br> GOVT. HOSPITAL <br> GOVT. HEALTH <br> CENTER <br> PHU/CLINIC <br> MOBILE CLINIC <br> RHM <br> OTHER PUBLIC <br> (SPECIFY) <br> PRIVATE SECTOR <br> PVT. HOSPITAL/ CLINIC <br> PHARMACY <br> PVT. DOCTOR <br> MOBILE CLINIC <br> OTHER PRIVATE <br> MISSION <br> HOSPITAL <br> CLINIC <br> OTHER MISSION <br> NGO <br> TASC <br> OTHER SOURCE <br> SHOP <br> TRADITIONAL HEALER <br> OTHER (SPECIFY) |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1012 | What was the main reason for not seeking advice or treatment? |  |  |
| 1013 | When you had (PROBLEM(S) FROM 1006/1007/1008), did you inform the person(s) with whom you were having sex? |  | $\longrightarrow 1101$ |
| 1014 | When you had (PROBLEM(S) FROM 1006/1007/1008), did you do anything to avoid infecting your sexual partner(s)? |  | $\longrightarrow \quad 1101$ |
| 1015 | What did you do to avoid infecting your partner(s)? Did you.... <br> Use medicine? <br> Stop having sex? <br> Use a condom when having sex? |  YES NO <br> USE MEDICINE $\ldots \ldots$. 1 2 <br> STOP SEX $\ldots \ldots .$. 1 2 <br> USE CONDOM $\ldots \ldots$. 1 2 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1101 | Now I would like to ask you some other questions relating to health matters. <br> Some women are circumcised, that is, they may have part of their genital cut. <br> Are you circumcised? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 |  |
| 1102 | Have you had an injection for any reason in the last 12 months? <br> IF YES: How many injections have you had? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD ' 90 '. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS <br> NONE | $\longrightarrow 1106$ |
| 1103 | Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD ' 90 '. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS <br> NONE | $\rightarrow 1106$ |
| 1104 | The last time you had an injection given to you by a health worker where did you go to get the injection? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> WRITE THE NAME OF THE PLACE. |  |  |
| 1105 | Did the person who gave you that injection take the syringe and needle from a new, unopened package? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |
| 1106 | Do you currently smoke cigarettes? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $\longrightarrow 1108$ |
| 1107 | In the last 24 hours, how many cigarettes did you smoke? | CIGARETTES . . . . . . . . . . . . . $\square$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1108 | Do you currently smoke or use any other type of tobacco? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 1110$ |
| 1109 | What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED. |  |  |
| 1110 | Do you drink alcohol? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 1112$ |
| 1111 | How often do you drink alcohol? |  |  |
| 1112 | Have you ever heard of an illness called tuberculosis or TB? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $\longrightarrow 1116$ |
| 1113 | How does tuberculosis spread from one person to another? <br> PROBE: Any other ways? <br> RECORD ALL MENTIONED. |  |  |
| 1114 | Can tuberculosis be cured? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |
| 1115 | If a member of your family got tuberculosis, would you want it to remain a secret or not? |  |  |
| 1116 | Now I would like to ask you some questions about medical care for you yourself. <br> Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not? <br> Getting permission to go? <br> Getting money needed for treatment? <br> The distance to the health facility? <br> Having to take transport? <br> Not wanting to go alone? <br> Concern that there may not be a female health provider? <br> Concern that there may not be any health provider? <br> Concern that there may be no drugs available? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1117 | Did you use any soap for any purpose yesterday or today? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 1119$ |
| 1118 | For what purpose did you use the soap? <br> Any other purpose? <br> RECORD ALL MENTIONED. | HANDWASHING <br> BEFORE EATING ................. A <br> AFTER EATING . . .................... B <br> AFTER USING TOILET . . .......... C <br> AFTER CLEANING CHILD'S BOTTOM....................... . D <br> BEFORE PREPARING FOOD ... E <br> BEFORE FEEDING CHILD ..... F <br> OTHER $\qquad$ G <br> (SPECIFY) <br> WASHING OWN BODY <br> WASHING CHILD'S HANDS $\qquad$ <br> WASHING CHILD'S BODY .......... J <br> WASHING CLOTHES/ <br> DISHES .................................. K <br> OTHER $\qquad$ X |  |
| 1119 | Are you covered by any medical aid? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $\longrightarrow 1121$ |
| 1120 | What type of medical aid? <br> RECORD ALL MENTIONED. | EMPLOYER $\ldots \ldots \ldots \ldots \ldots \ldots$ <br> SELF $\ldots \ldots \ldots \ldots$ <br> EMPLOYER AND SELF $\ldots \ldots \ldots \ldots$ <br> OTHER $\ldots \ldots$ <br> (SPECIFY) |  |
| 1121 | Are you the primary care giver for any children? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 1201$ |
| 1122 | Are any of these children for whom you are the primary caregiver under the age of 18 ? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 1201$ |
| 1123 | Now I would like to ask you about the child(ren) who (is/are) under the age of 18 and for whom you are the primary caregiver. <br> Have you made arrangements for someone to care for (this child/these children) in the event that you fall sick or are unable to care for (him/her/them)? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 UNSURE . . . . . . . . . . . . . . . . . . . . . . . . . . . 8 |  |
| 1124 | Are you comfortable talking to the children in your care about sex and HIV/AIDS? |  |  |

SECTION 12. MATERNAL MORTALITY

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 1201 | Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your natural mother, including those who are living with you, those living elsewhere and those who have died. <br> How many children did your mother give birth to, including you? | NUMBER OF BIRTHS TO NATURAL MOTHER |  |  |
| 1202 | $\begin{align*} & \text { CHECK 1201: } \\ & \text { TWO OR MORE BIRTHS } \end{align*}$ | BIRTH ONLY) |  | \#\#\# |
| 1203 | How many of these births did your mother have before you were born? <br> DRAW AN ARROW AFTER THE RESPONDENT'S NEXT OLDER SIBLING. <br> EXCLUDE THE RESPONDENT FROM 1204. | NUMBER OF PRECEDING BIRTHS |  |  |


| 1204 | What was the name given to your oldest (next oldest) brother or sister? | (1) | (2) | (3) | (4) | (5) | (6) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1205 | Is (NAME) male or female? | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ |
| 1206 | Is (NAME) still alive? | $\left.\begin{array}{ccc} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } 1208 & \boxed{4} \\ \text { DK } & \ldots & 8 \\ \text { GO TO (2) } & 4 \end{array}\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } 1208 & \boxed{4} \\ \text { DK } & \ldots & 8 \\ \text { GO TO (3) } & 4 \end{array}\right.\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 1208 & \longleftarrow \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (4) & \longleftarrow \end{array}\right.\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } 1208 & 4 \\ \text { DK } & \ldots & 8 \end{array}\right.\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } 1208 & 4 \\ \text { DK } & \ldots & 8 \end{array}\right.\right]$ | $\left.\begin{array}{ccc} \begin{array}{ccc} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array} \\ \text { GO TO } 1208 & \boxed{4} \\ \text { DK } & \ldots & 8 \\ \text { GO TO (7) } & \boxed{4} \end{array}\right]$ |
| 1207 | How old is (NAME)? |  |  |  |  |  |  |
| 1208 | How many years ago did (NAME) die? |  |  |  |  | $1$ |  |
| 1209 | How old was (NAME) when he/she died? | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (2) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (3) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (4) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (5) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (6) | IF MALE OR DIED BEFORE 12 YEARS OF AGE GO TO (7) |
| 1210 | Was (NAME) pregnant when she died? | $\left.\begin{array}{c}\text { YES . . . } \\ \text { GO TO } 1213 \\ \text { NO } \ldots\end{array}\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { GO TO } 1213 & 4 \\ \text { NO } & \ldots & 2 \end{array}\right.\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { GO TO } 1213 & 4 \\ \text { NO } & \ldots & 2 \end{array}\right.\right]$ | $\left[\begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { GO TO } & 1213 & 4 \\ \text { NO } & \ldots & 2 \end{array}\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots & 1 \\ \text { GO TO } 1213 & 4 \\ \text { NO } & \ldots & 2 \end{array}\right.\right]$ | $\left[\begin{array}{ccc} \text { YES } \ldots & 1 \\ \text { GO TO } & 1213 & 4 \\ \text { NO } & \ldots & 2 \end{array}\right]$ |
| 1211 | Did (NAME) die during childbirth? | $\left[\begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { GO TO } 1213 & 4 \\ \text { NO } & \ldots & 2 \end{array}\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { GO TO } 1213 & \boxed{4} \\ \text { NO } \ldots . & 2 \end{array}\right.\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots & 1 \\ \text { GO TO } 1213 & \boxed{4} \\ \text { NO } \ldots & 2 \end{array}\right.\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { GO TO } 1213 & 4 \\ \text { NO } \ldots . & 2 \end{array}\right.\right]$ | $\left.\left\lvert\, \begin{array}{ccc} \text { YES } \ldots & 1 \\ \text { GO TO } 1213 & 4 \\ \text { NO } \ldots . & 2 \end{array}\right.\right]$ | $\left[\begin{array}{ccc} \text { YES ... } & 1 \\ \text { GO TO } 1213 & 4 \\ \text { NO } \ldots . & 2 \end{array}\right]$ |
| 1212 | Did (NAME) die within two months after the end of a pregnancy or childbirth? | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ | $\begin{array}{ccc} \text { YES ... } & 1 \\ \text { NO } \ldots . & 2 \end{array}$ | $\begin{array}{lll} \text { YES } \ldots & 1 \\ \text { NO } & \ldots & 2 \end{array}$ |
| 1213 | How many live born children did (NAME) give birth to during her lifetime (before this pregnancy)? |  |  |  |  |  |  |

IF NO MORE BROTHERS OR SISTERS, GO TO 1214.


INSTRUCTIONS
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.

|  | 12 | DEC | 01 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 11 | NOV | 02 |  |
|  | 10 | OCT | 03 |  |
|  | 09 | SEP | 04 |  |
| 2 | 08 | AUG | 05 |  |
| 0 | 07 | JUL | 06 |  |
| 0 | 06 | JUN | 07 |  |
| 6 | 05 | MAY | 08 |  |
|  | 04 | APR | 09 |  |
|  | 03 | MAR | 10 |  |
|  | 02 | FEB | 11 |  |
|  | 01 | JAN | 12 |  |
|  | 12 | DEC | 13 |  |
|  | 11 | NOV | 14 |  |
|  | 10 | OCT | 15 |  |
|  | 09 | SEP | 16 |  |
| 2 | 08 | AUG | 17 |  |
| 0 | 07 | JUL | 18 |  |
| 0 | 06 | JUN | 19 |  |
| 5 | 05 | MAY | 20 |  |
|  | 04 | APR | 21 |  |
|  | 03 | MAR | 22 |  |
|  | 02 | FEB | 23 |  |
|  | 01 | JAN | 24 |  |
|  | 12 | DEC | 25 |  |
|  | 11 | NOV | 26 |  |
|  | 10 | OCT | 27 |  |
|  | 09 | SEP | 28 |  |
| 2 | 08 | AUG | 29 |  |
| 0 | 07 | JUL | 30 |  |
| 0 | 06 | JUN | 31 |  |
| 4 | 05 | MAY | 32 |  |
|  | 04 | APR | 33 |  |
|  | 03 | MAR | 34 |  |
|  | 02 | FEB | 35 |  |
|  | 01 | JAN | 36 |  |
|  | 12 | DEC | 37 |  |
|  | 11 | NOV | 38 |  |
|  | 10 | OCT | 39 |  |
|  | 09 | SEP | 40 |  |
| 2 | 08 | AUG | 41 |  |
| 0 | 07 | JUL | 42 |  |
| 0 | 06 | JUN | 43 |  |
| 3 | 05 | MAY | 44 |  |
|  | 04 | APR | 45 |  |
|  | 03 | MAR | 46 |  |
|  | 02 | FEB | 47 |  |
|  | 01 | JAN | 48 |  |
|  | 12 | DEC | 49 |  |
|  | 11 | NOV | 50 |  |
|  | 10 | OCT | 51 |  |
|  | 09 | SEP | 52 |  |
| 2 | 08 | AUG | 53 |  |
| 0 | 07 | JUL | 54 |  |
| 0 | 06 | JUN | 55 |  |
| 2 | 05 | MAY | 56 |  |
|  | 04 | APR | 57 |  |
|  | 03 | MAR | 58 |  |
|  | 02 | FEB | 59 |  |
|  | 01 | JAN | 60 |  |
|  | 12 | DEC | 61 |  |
|  | 11 | NOV | 62 |  |
|  | 10 | OCT | 63 |  |
|  | 09 | SEP | 64 |  |
| 2 | 08 | AUG | 65 |  |
| 0 | 07 | JUL | 66 |  |
| 0 | 06 | JUN | 67 |  |
| 1 | 05 | MAY | 68 |  |
|  | 04 | APR | 69 |  |
|  | 03 | MAR | 70 |  |
|  | 02 | FEB | 71 |  |
|  | 01 | JAN | 72 |  |

# TO BE FILLED IN AFTER COMPLETING INTERVIEW 

COMMENTS ABOUT RESPONDENT:

## COMMENTS ON SPECIFIC QUESTIONS:

$\qquad$

## ANY OTHER COMMENTS:

$\qquad$

SUPERVISOR'S OBSERVATIONS
$\qquad$

EDITOR'S OBSERVATIONS

NAME OF EDITOR: $\qquad$ DATE: $\qquad$

## 2006 SWAZILAND DEMOGRAPHIC AND HEALTH SURVEY MEN'S QUESTIONNAIRE





| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 110 | What is the highest (grade/form/year) you completed at that level? | GRADE/FORM/YEAR |  |
| 111 | CHECK 109:   <br> ANY PRIMARY  SECONDARY <br> CODE '1' OR '2' $\square$ OR HIGHER <br> CIRCLED   | $\square$ | $\rightarrow 115$ |
| 112 | Now I would like you to read this sentence to me. <br> SHOW CARD TO RESPONDENT. <br> IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any other part of the sentence to me? | CANNOT READ AT ALL <br> ABLE TO READ ONLY PARTS OF SENTENCE <br> ABLE TO READ WHOLE SENTENCE <br> NO CARD WITH REQUIRED <br> LANGUAGE $\qquad$ <br> (SPECIFY LANGUAGE) <br> BLIND/VISUALLY IMPAIRED |  |
| 113 | Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)? | YES <br> NO |  |
| 114 | CHECK 112: |  | 116 |
| 115 | Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL |  |
| 116 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL |  |
| 117 | Do you watch television almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A WEEK <br> LESS THAN ONCE A WEEK <br> NOT AT ALL |  |
| 118 | What is your religion? <br> NAME OF CHURCH | TRADITIONAL CHARISMATIC PROTESTANT <br> ROMAN CATHOLIC <br> PENTECOSTAL <br> ZIONIST <br> APOSTOLIC SECT <br> ISLAM <br> NONE <br> OTHER $\qquad$ <br> (SPECIFY) |  |

SECTION 2. REPRODUCTION



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 303 | CHECK 302 (02): |  | $\rightarrow 305 \mathrm{~A}$ |
| 304 | Are you currently doing something or using any method with any partner to delay or avoid a pregnancy? | $\begin{aligned} & \text { YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 2 \\ & \text { NO . . . . . . . . . . . . . . . . . . } \end{aligned}$ | $\longrightarrow 306$ |
| 305 | Which methods are you or your partner using to delay or avoid a pregnancy? <br> Any other method (with any partner)? <br> CIRCLE ALL MENTIONED. <br> CIRCLE 'B' FOR MALE STERILIZATION. |  |  |
| 306 | In the last six months have you heard/seen about family planning <br> On the radio? <br> On the television? <br> In a newspaper or magazine? |  |  |
| 307 | In the last six months, have you discussed the practice of family planning with a health worker or health professional? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |
| 308 | Now I would like to ask you about a woman's risk of pregnancy From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 NO . . . . . . . . . . . . . . . . . . . . . 8 | $\xrightarrow{\longrightarrow} 310$ |
| 309 | Is this time just before her period begins, during her period, righ after her period has ended, or halfway between two periods? |  |  |
| 310 | Do you think that a woman who is breastfeeding her baby car become pregnant? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . . . . 3 DEPENDS . . . . . . . . . . . . . . . . 8 |  |
| 311 | I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. <br> a) Contraception is women's business and a man should not have to worry about it. <br> b) Women who use contraception may become promiscuous. |   DIS- <br>  AGREE AGREE DK |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 401 | Are you currently married or living together with a woman as if married? | YES, CURRENTLY MARRIED YES, LIVING WITH A WOMAN NO, NOT IN UNION | $\begin{array}{rrr}  & \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots . . & & 3 \end{array}$ | $\xrightarrow{\longrightarrow} 404$ |
| 402 | Have you ever been married or lived together with a woman as if married? | YES, FORMERLY MARRIED YES, LIVED WITH A WOMAN NO | $\begin{array}{ll} \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 3 \end{array}$ | $\rightarrow 413$ |
| 403 | What is your marital status now: are you widowed, divorced, or separated? | WIDOWED <br> DIVORCED SEPARATED | $\begin{gathered} \ldots . . . .^{1} \\ \ldots . . . .^{2} \\ \ldots . . . \end{gathered}$ | $\rightarrow 410$ |
| 404 | Is your wife/partner living with you now or is she staying elsewhere? | LIVING WITH HIM STAYING ELSEWHERE | $\begin{array}{ll} \ldots . . & 1 \\ \ldots . . & 2 \end{array}$ |  |
| 405 | Do you have more than one wife or do you have more than one woman with whom you are living as if married? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots . . & 1 \\ \ldots . . & 2 \\ \ldots . . & 8 \end{array}$ | $\xrightarrow{\longrightarrow} 407$ |
| 406 | In total, how many wives do you have or other partners do you live with now as if married? | TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS DON'T KNOW |   <br> $\ldots$ 98 |  |
| 407 | CHECK 405 <br> ONE WIFE/ <br> PARTNER <br> Please tell me the name of your wife (the woman you are living with as if married). $\begin{aligned} & \text { MORE THAN } \\ & \text { ONE WIFE/ } \\ & \text { PARTNER } \\ & \text { Please tell me the name of } \\ & \text { each of your current wives } \\ & \text { (and/or of each woman you } \\ & \text { are living with as if married). } \end{aligned}$ <br> RECORD THE NAME(S) AND THE LINE NUMBER(S) FROM THE HOUSEHOLD QUESTIONNAIRE FOR THE WIFE (WIVES) AND LIVE-IN PARTNER(S). <br> IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. <br> ASK 408 FOR EACH PERSON. | NAME <br> LINE NUMBER $\qquad$ $\qquad$ $\qquad$ $\qquad$ | 408 How old was (NAME) on her last birthday? <br> AGE |  |
| 409 | CHECK 407: <br> MORE THAN <br> ONE WIFE/ <br> ONE WIFE/ <br> PARTNER PARTNER |  |  | $\rightarrow 411 \mathrm{~A}$ |
| 410 | Have you been married or lived with a woman only once or more than once? | ONLY ONCE <br> MORE THAN ONCE | $\begin{array}{ll}  & \\ \ldots . . & 1 \\ \ldots . . & 2 \end{array}$ | $\rightarrow 411 \mathrm{~A}$ |
| 411 $411 A$ | In what month and year did you start living with your wife (partner)? <br> Now I would like to ask a question about your first wife/partner. In what month and year did you start living with your first wife/ partner? | MONTH <br> DON'T KNOW MONTH <br> YEAR $\square$ <br> DON'T KNOW YEAR |   <br> $\ldots .9$ | $\longrightarrow 413$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |
| :---: | :---: | :---: |
| 412 | How old were you when you first started living with her? | AGE |
| 413 | CHECK FOR THE PRESENCE OF OTHERS. <br> BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE P |  |
| 414 | Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. <br> How old were you when you had sexual intercourse for the very first time? | NEVER HAD SEXUAL <br> INTERCOURSE <br> AGE IN YEARS $\qquad$ <br> FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER |
| 415 | Do you intend to wait until you get married to have sexual intercourse for the first time? |  |
| 416 | CHECK 107: $\begin{aligned} & \text { AGE } \\ & 15-24 \\ & \\ & \square\end{aligned} \begin{array}{r}\text { AGE } \\ 25-49\end{array}$ |  |
| 417 | The first time you had sexual intercourse, was a male/female condom used? | YES, MALE CONDOM YES, FEMALE CONDOM NO |
| 417A | What was the main reason you did not use a condom the first time you had sexual intercourse? | NOT AVAILABLE <br> NOT NECESSARY <br> NOT THOUGHT OF <br> PARTNER REFUSED <br> REDUCES PLEASURE <br> OTHER <br> (SPECIFY) |
| 418 | How old was the person you first had sexual intercourse with? | AGE OF PARTNER DON'T KNOW |
| 419 | Was this person older than you, younger than you, or about the same age as you? | OLDER <br> YOUNGER <br> ABOUT THE SAME AGE <br> DON'T KNOW/DON'T REMEMBER |
| 420 | Would you say this person was ten or more years older than you or less than ten years older than you? | TEN OR MORE YEARS OLDER LESS THAN TEN YEARS OLDER OLDER, UNSURE HOW MUCH |
| 421 | Now I would like to ask you some questions about your recent sexu Let me assure you again that your answers are completely confiden If we should come to any question that you don't want to answer, ju question. | ctivity. <br> and will not be told to anyone. me know and we will go to the next |
| 421A | When was the last time you had sexual intercourse? <br> IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. <br> IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS. |  |


|  |  | LAST SEXUAL PARTNER | SECOND-TO-LAST SEXUAL PARTNER | THIRD-TO-LAST SEXUAL PARTNER |
| :---: | :---: | :---: | :---: | :---: |
| 422 | When was the last time you had sexual intercourse with this person? |  | DAYS . 1   <br>      <br> WEEKS 2    <br>      <br>      <br>      | $\begin{array}{lll} \text { DAYS .. } & 1 \\ \text { WEEKS } & 2 \\ \text { MONTHS } & 3 \end{array}$ |
| 423 | The last time you had sexual intercourse with this (second/ third) person, was a male condom or a female condom used? |  |  | YES, MALE CONDOM <br> (SKIP TO 424) 1 <br> YES, FEMALE  <br> CONDOM $\ldots \ldots \ldots$ 2 <br> NO ................... 3 |
| 423A | What was the main reason you did not use a condom the last time you sexual intercourse? |  |  |  |
| 424 | Did you use a condom every time you had sexual intercourse with this person in the last 12 months? |  |  | YES ................. 1 NO .................. 2 |
| 425 | What was your relationship to this person with whom you had sexual intercourse? <br> IF PARTNER <br> Were you living together as if married? <br> IF YES, CIRCLE '2' <br> IF NO, CIRCLE '3' |  | WIFE <br> (SKIP TO 431) <br> LIVE-IN PARTNER <br> PARTNER NOT <br> LIVING WITH <br> RESPONDENT ... 3 CASUAL <br> ACQUAINTANCE ... 4 COMMERCIAL <br> SEX WORKER ... 5 OTHER $\qquad$ 6 | WIFE $\ldots . . . . .$. 1  <br> (SKIP TO 431) $\longleftarrow$ 1  <br> LIVE-IN PARTNER $\ldots$ 2  <br> PARTNER NOT    <br> LIVING WITH    <br> RESPONDENT $\ldots$ 3  <br> CASUAL    <br> ACQUAINTANCE $\ldots$ 4  <br> COMMERCIAL    <br> SEX WORKER $\ldots$ 5  <br> OTHER    <br>     <br>  (SPECIFY)   |
| 426 | For how long (have you had/did you have) a sexual relationship with this person? <br> IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS. | DAYS . 1 MONTHS 2 YEARS 3 |  | DAYS . 1   <br>      <br> MONTHS 2    <br>      <br> YEARS 3    <br>      |
| 427 | CHECK 107: | $\begin{array}{lr}\text { AGE } & \text { AGE } \\ 15-24 & 25-49 \\ \square & \square \\ \square & \text { (SKIP TO 431) }\end{array}$ | AGE AGE  <br> $15-24$ $25-49$ $\square$ <br> $\square$   <br> $\square$   |  |
| 428 | How old is this person? | AGE OF PARTNER $\square$ (SKIP TO 431) $\qquad$ DON'T KNOW $\qquad$ | AGE OF PARTNER $\square$ <br> (SKIP TO 431) $\qquad$ <br> DON'T KNOW $\qquad$ |  |
| 429 | Is this person older than you, younger than you, or about the same age? | OLDER $\ldots \ldots .$. 1 <br> YOUNGER $\ldots \ldots$. 2 <br> SAME AGE ........ 3 <br> DON'T KNOW $\ldots .$. 8 <br> (SKIP TO 431)  | OLDER $\ldots \ldots$. 1  <br> YOUNGER $\ldots \ldots$ 2  <br> SAME AGE $\ldots \ldots$ 3  <br> DON'T KNOW $\ldots$ 8 8 <br> (SKIP TO 431$)$    | OLDER $\ldots \ldots .$. 1  <br> YOUNGER $\ldots \ldots$ 2  <br> SAME AGE $\ldots \ldots$ 3  <br> DON'T KNOW $\ldots$ 8 8 <br> (SKIP TO 431$)$    |
| 430 | Would you say this person is ten or more years older than you or less than ten years older than you? | TEN OR MORE   <br> YEARS OLDER $\cdot$ 1 <br> LESS THAN TEN   <br> YEARS OLDER   <br> OLDER, UNSURE  2 <br> HOW MUCH $\ldots$. 3 |  | TEN OR MORE   <br> YEARS OLDER . 1 <br> LESS THAN TEN   <br> YEARS OLDER . 2 <br> OLDER, UNSURE   <br> HOW MUCH $\ldots$. 3 |


|  |  | LAST SEXUAL PARTNER | SECOND-TO-LAST SEXUAL PARTNER | THIRD-TO-LAST SEXUAL PARTNER |
| :---: | :---: | :---: | :---: | :---: |
| 431 | The last time you had sexual intercourse with this person, did you or this person drink alcohol or used any other intoxicating substance? |   YES NO <br>     <br> ALCOHOL $\ldots$ 1 2  <br> OTHER $\ldots$. 1 2  <br> (SKIP TO 433) $\longleftarrow$   |   YES NO <br>     <br> ALCOHOL 1 2  <br> OTHER $\ldots$. 1 2  <br> (SKIP TO 433) $\longleftarrow$   |   YES NO <br>     <br> ALCOHOL . 1 2 <br> OTHER $\ldots$. 1 2  <br> (SKIP TO 433)    |
| 431A | CHECK 431: | $\begin{array}{lc}\text { ANY } & \text { ALL } \\ \text { YES } & \text { NO } \\ \square & \\ \square & \text { (SKIP TO 433) }\end{array}$ | $\begin{array}{lc}\text { ANY } & \text { ALL } \\ \text { YES } & \text { NO } \\ \square & \\ \square & \text { (SKIP TO 433) }\end{array}$ |  |
| 432 | Were you or your partner drunk at that time? <br> IF YES: Who was drunk? | RESPONDENT ONLY 1  <br> PARTNER ONLY $\ldots$. 2  <br> RESPONDENT AND   <br> $\quad$ PARTNER BOTH . 3 <br> NEITHER . . . . . . . . . 4  | RESPONDENT ONLY 1  <br> PARTNER ONLY ... 2  <br> RESPONDENT AND   <br> PARTNER BOTH . 3 <br> NEITHER ........... 4  | RESPONDENT ONLY 1 <br> PARTNER ONLY ... 2 <br> RESPONDENT AND  <br> PARTNER BOTH . . 3 <br> NEITHER .......... 4 |
| 433 | Apart from [this person/these two people], have you had sexual intercourse with any other person in the last 12 months? |  |  |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 444 | From where did you obtain the condom the last time? <br> PROBE TO IDENTIFY TYPE OF SOURCE AND CIRCLE THE APPROPIATE CODE. <br> WRITE THE NAME OF PLACE <br> (NAME OF PLACE(S)) |  | $448$ |
| 444A | How do you usually dispose the used condoms? |  |  |
| 445 | CHECK 301(7), KNOWS MALE CONDOM <br> HAS HEARD OF <br> HAS NEVER HEAR MALE CONDOM MALE CONDOM |  | 501 |
| 445A | Do you know of a place where a person can get male condoms? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad 1$ NO . . . . . . . . . . . . . . . . . . | $\rightarrow 447 \mathrm{~A}$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 446 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY TYPE(S) OF SOURCE(S) AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 447 | If you wanted to, could you yourself get a condom? |  |  |
| 447A |  |  | 501 |
| 448 | Do you know of a place where a person can get female condoms? |  | $\rightarrow 501$ |
| 449 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY TYPE(S) OF SOURCE(S) AND CIRCLE <br> THE APPROPRIATE CODE(S). <br> WRITE THE NAME OF THE PLACE |  |  |
| 450 | If you wanted to, could you yourself get a female condom? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 501 | CHECK 407: |  | $\rightarrow 506$ |
| 502 | CHECK 305: |  | $\longrightarrow 506$ |
| 503 | (Is your wife (partner)/Are any of your wives (partners)) currently pregnant? |  |  |
| 504 | CHECK 503: | HAVE (A/ANOTHER) CHILD $\ldots \ldots \ldots$ 1  <br> NO MORE/NONE $\ldots \ldots \ldots \ldots \ldots \ldots$ 2  <br> MAN INFECUND $\ldots \ldots \ldots \ldots \ldots$ 3  <br> WIFE (WIVES)/PARTNER(S)    <br> INFECUND/STERILIZED $\ldots \ldots \ldots$ 4  <br> UNDECIDED/DON'T KNOW $\ldots \ldots \ldots$   | $] \rightarrow 506$ |
| 505 | How long would you like to wait from now before the birth of (a/another) child? |  |  |
| 506 | CHECK 208 <br> HAS LIVING CHILDREN NO LIVING CHILDREN NEVER HAD CHILDREN $\downarrow$ <br> If you could go back to the time If you could choose exactly the you did not have any children number of children to have in and could choose exactly the your whole life, how many number of children to have in would that be? your whole life, how many would that be? |  |  |
| 507 | How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter? |  |  |

SECTION 6. MAN'S WORK

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 601 | Are you currently working? |  | $\rightarrow 604$ |
| 601A | Have you done any work in the last seven days? |  | $\longrightarrow 604$ |
| 602 | Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason? |  | $\longrightarrow 604$ |
| 603 | Have you done any work in the last 12 months? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 603 \mathrm{~B}$ |
| 603A | During the last 12 months, how many months did you work? | NUMBER OF MONTHS . . . . . . . . . . . . | $\longrightarrow 604$ |
| 603B | What have you been doing for most of the time over the last 12 months? |  | $\square \rightarrow \quad 610$ |
| 604 | What is your occupation, that is, what kind of work do you mainly do? | $\qquad$ |  |
| 605 | CHECK 604: <br> WORKS IN <br> DOES AGRICULTURE IN AG | $\begin{aligned} & \text { RK } \\ & \text { JRE } \end{aligned}$ | $\longrightarrow 607$ |
| 606 | Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land? |  |  |
| 607 | Do you do this work for a member of your family, for someone else, or are you self-employed? |  |  |
| 608 | Do you usually work throughout the year, or do you work seasonally, or only once in a while? | THROUGHOUT THE YEAR . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> SEASONALLY/PART OF THE YEAR . . . . . . . . . . . . . . . .  |  |
| 609 | Are you paid in cash or kind for this work or are you not paid at all? |  |  |
| 610 | CHECK 401: <br> ONE OR MORE WIVES/PARTNERS | UNION | $\longrightarrow 613$ |
| 611 | CHECK 609: <br> CODE 1 OR 2 CIRCLED | ER $\square$ | $\longrightarrow 613$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 612 | Who decides how the money you earn will be used: mainly you, mainly your (wife (wives)/partner(s)), or you and your (wife (wives)/partner(s)) jointly? | RESPONDENT <br> WIFE/PARTNER <br> RESPONDENT AND WIFE/ <br> PARTNER JOINTLY <br> SOMEONE ELSE <br> RESPONDENT AND SOMEONE <br> ELSE JOINTLY | $\begin{array}{cc} \ldots \ldots \ldots & 1 \\ \ldots \ldots . & 2 \\ & \\ \ldots \ldots & 3 \\ \ldots \ldots & 4 \\ \ldots \ldots . & 5 \end{array}$ |  |
| 612A | On average, how much of your household's expenditures do your earnings pay for: almost none less than half, about half, more than half, or all? | ALMOST NONE <br> LESS THAN HALF <br> ABOUT HALF <br> MORE THAN HALF <br> ALL <br> NONE, HIS INCOME <br> IS ALL SAVED |   <br> $\ldots \ldots$. 1 <br> $\ldots \ldots$. 2 <br> $\ldots \ldots$. 3 <br> $\ldots \ldots$. 4 <br> $\ldots \ldots$. 5 |  |
| 613 | Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified justified in hitting or beating his wife in the following situations: <br> If she goes out without telling him? <br> If she neglects the children? <br> If she argues with him? <br> If she refuses to have sex with him? <br> If she burns the food? <br> If she has sex with other men? |  | NO DK <br> 2 8 <br> 2 8 <br> 2 8 <br> 2 8 <br> 2 8 <br> 2 8 |  |

SECTION 7. HIV AND OTHER SEXUALLY TRANSMITTED INFECTIONS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 701 | Now I would like to talk about something else. Have you ever heard of an illness called AIDS? |  | $\rightarrow 735$ |
| 702 | Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other partners? |  |  |
| 703 | Can people get the AIDS virus from mosquito bites? |  |  |
| 704 | Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex? |  |  |
| 705 | Can people get the AIDS virus by sharing food with a person who has AIDS? |  |  |
| 706 | Can people reduce their chance of getting the AIDS virus by abstaining from sexual intercourse? |  |  |
| 707 | Can people get the AIDS virus because of witchcraft or other supernatural means? |  |  |
| 707A | Can people get the the AIDS virus from having anal sex? |  |  |
| 707B | Can people get the AIDS virus from oral sex? |  |  |
| 707C | Can people get the AIDS virus from open wounds or sores of an infected person? |  |  |
| 708 | Is there anything else a person can do to avoid or reduce the chances of getting the AIDS virus? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2 <br> DONT KNOW $\ldots \ldots \ldots \ldots \ldots \ldots$ 8 | $\xrightarrow{\longrightarrow} 710$ |
| 709 | What can a person do? <br> Anything else? <br> RECORD ALL WAYS MENTIONED. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 710 | Is it possible for a healthy-looking person to have the AIDS virus? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 711 | Can the virus that causes AIDS be transmitted from a mother to her baby: <br> During pregnancy? <br> During delivery? <br> By breastfeeding? |    YES <br>     <br> DURING PREG. $\ldots$. 1  <br> DURING DELIVERY $\ldots$ 1  <br> BREASTFEEDING $\ldots$ 1  | NO DK <br> 2 8 <br> 2 8 <br> 2 8 |  |
| 712 | CHECK 711: <br> AT LEAST ONE 'YES' |  |  | $\rightarrow 714$ |
| 713 | Are there any special medications that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby? | YES <br> NO DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 714 | Have you heard about special anteretorviral drugs (ARV) that people infected with the AIDS virus can get from a doctor or a nurse? | YES <br> NO DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 714A | CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY |  |  |  |
| 715 | I don't want to know the results, but have you ever been tested to see if you have the AIDS virus? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll}  & \\ \ldots \ldots & 1 \\ \ldots . . & 2 \end{array}$ | $\longrightarrow 720$ |
| 716 | When was the last time you were tested? | LESS THAN 12 MONTHS AGO 12-23 MONTHS AGO 2 OR MORE YEARS AGO | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 717 | The last time you had the test, did you yourself ask for the test or were you advised to take the test, or was it required? | ASKED FOR THE TEST ADVICED REQUIRED | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 3 \end{array}$ |  |
| 718 | I don't want to know the results, but did you get the results of the test? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \end{array}$ |  |
| 718A | How long did it take to get the results? | SAME DAY <br> WITHIN ONE WEEK WITHIN ONE MONTH MORE THAN A MONTH | $\begin{array}{ll} \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ \ldots \ldots & 3 \\ \ldots \ldots & 4 \end{array}$ |  |
| 719 | Where did you go to take the test? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> WRITE THE NAME OF THE PLACE. | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL <br> GOVT. HEALTH CENTER <br> PHU/CLINIC $\qquad$ <br> MOBILE CLINIC $\qquad$ <br> RHM/CBD . <br> OTHER PUBLIC $\qquad$ <br> PRIVATE SECTOR <br> PRIVATE HOSPITAL/CLINIC <br> PRIVATE DOCTOR <br> STAND-ALONE VCT CENTE <br> MOBILE CLINIC. <br> OTHER PRIVATE <br> MISSION HOSPITAL <br> CLINIC . <br> OTHER MISSION <br> (SPECIFY) <br> NGO <br> FLAS <br> TASC <br> OTHER NGO $\qquad$ <br> (SPECIFY) <br> OTHER $\qquad$ <br> (SPECIF |   <br> $\ldots . .$. 11 <br> $\ldots .$. 12 <br> $\ldots .$. 13 <br> $\ldots .$. 14 <br> $\ldots .$. 15 <br>  16 <br> F)  <br> Y) <br> $\begin{array}{ll} & \\ \ldots . . & 31 \\ \ldots & 32 \\ & 36\end{array}$ <br> $\begin{array}{ll} \\ \\ \\ \\ \ldots & \\ \ldots . . & 41 \\ \ldots & 42 \\ & 46\end{array}$ $\qquad$ <br> 96 |  |
| 720 | Do you know of a place where people can go to get tested for the AIDS virus? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll} \ldots \ldots . & 1 \\ \ldots \ldots & 2 \end{array}$ | $\longrightarrow 722$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 721 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY TYPE(S) OF SOURCE(S) AND CIRCLE THE APPROPRIATE CODE(S). <br> WRITE THE NAME OF THE PLACE. <br> (NAME OF PLACE) | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL ......... A <br> GOVT. HEALTH CENTER ......... B <br> STAND-ALONE VCT CENTEF.......... C <br> MOBILE CLINIC ..................... D <br> OTHER PUBLIC $\qquad$ E <br> (SPECIFY) <br> PRIVATE SECTOR <br> PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR ............... F <br> STAND-ALONE VCT CENTEF......... G <br> MOBILE CLINIC....................... H <br> OTHER PRIVATE |  |
| 722 | Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus? |  |  |
| 723 | If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not? |  |  |
| 724 | If a member of your family became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots$ <br> DKINOT SURE/DEPENDS $\ldots \ldots \ldots \ldots$ |  |
| 725 | In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school? | SHOULD BE ALLOWED $\ldots . . . . . . . . .$. 1 <br> SHOULD NOT BE ALLOWED $\ldots \ldots .$. 2 <br> DK/NOT SURE/DEPENDS $\ldots . . . . . .$. 8 |  |
| 726 | Do you personally know someone who has been denied health services in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? |  | $\rightarrow 731$ |
| 727 | Do you personally know someone who has been denied involvement in social events, religious services, or community events in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? |  |  |
| 728 | Do you personally know someone who has been verbally abused or teased in the last 12 months because he or she is suspected to have the AIDS virus or has the AIDS virus? |  |  |
| 729 | CHECK 726, 727, AND 728: <br> OTHER | AT LEAST ONE "YES" $\square$ | $\rightarrow 731$ |
| 730 | Do you personally know someone who is suspected to have the AIDS virus or who has the AIDS virus? |  |  |
| 731 | Do you agree or disagree with the following statement: People with the AIDS virus should be ashamed of themselves. |  |  |
| 732 | Do you agree or disagree with the following statement: People with the AIDS virus should be blamed for bringing the disease into the community. |  |  |
| 733 | Should children age 12-14 be taught about using a condom to avoid AIDS? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 734 | Should children age 12-14 be taught to wait until they get married to have sexual intercourse in order to avoid AIDS? |  |  |
| 735 | CHECK 701: |  |  |
| 736 | CHECK 421A: <br> HAS HAD SEXUAL INTERCOURSE IN <br> LAST 12 MONTHS <br> (CODE 1,2,3) | SEXUAL URSE IN MONTHS (CODE 4) | $\rightarrow 744$ |
| 737 | CHECK 735: HEARD ABOUT OTHER SEXUALLY TRANSM <br> YES | ECTIONS? <br> No $\square$ | 739 |
| 738 | Now I would like to ask you some questions about you health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact? |  |  |
| 739 | Sometimes men experience an abnormal discharg $\epsilon$ from their penis. <br> During the last 12 months, have you had an abnormal discharge from your penis? |  |  |
| 740 | Sometimes men have a sore or ulcer near their penis During the last 12 months, have you had a sore or ulcer near your penis? |  |  |
| 741 | CHECK 738, 739, AND 740: $\begin{aligned} & \text { HAS HAD AN } \\ & \text { INFECTION } \\ & \text { (ANY 'YES') } \\ & \hline \end{aligned}$ | d INFECTION NOT KNOW | $\rightarrow 744$ |
| 742 | The last time you had (PROBLEM FROM 738/739/740), did you seek any kind of advice or treatment? |  | $\longrightarrow 743$ |
| 742A | What is the main reason for not seeking advice or treatment? | NOT NECESSARY ..................... 1 <br> EXPENSIVE .............................. 2 <br> RELIGIOUS PROHIBITIOR . . . . . . . . . . . . . . 3 <br> OTHER $\qquad$ 6 <br> (SPECIFY) |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 743 | Where did you go? <br> Any other place? <br> PROBE TO IDENTIFY TYPE(S) OF SOURCE(S) AND CIRCLE THE APPROPRIATE CODE(S). <br> WRITE THE NAME OF THE PLACE. |  |  |
| 743A | When you had (PROBLEM FROM 738/739/740), did you inform the person with whom you were having sex? |  | $\rightarrow 744$ |
| 743B | When you had (PROBLEM FROM 738/739/740), did you do something to avoid infecting your sexual partner(s)? |  | $\xrightarrow{\longrightarrow} 744$ |
| 743C | What did you do to avoid infecting your partner(s)? Did you .... <br> Use medicine? <br> Stop having sex? <br> Use a condom when having sex? |   YES NO <br>     <br> USE MEDICINE $\ldots \ldots \ldots \ldots$ 1 2 <br> STOP SEX $\ldots \ldots \ldots \ldots \ldots$ 1 2  <br> USE CONDOM $\ldots \ldots \ldots \ldots$ 1 2 |  |
| 744 | Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when she knows he has a disease that can be transmitted through sexual contact? |  |  |
| 745 | When a wife knows her husband has a disease that can be transmitted through sexual contact, is she justified in asking that they use a condom when they have sex? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 746 | Is a wife justified in refusing to have sex with her husband when she is tired or not in the mood? |  |  |
| 747 | Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with other women? |  |  |
| 748 | Do you believe that young men should wait until they are married to have sexual intercourse? |  |  |
| 749 | Do you think that most young men you know wait until they are married to have sexual intercourse? |  |  |
| 750 | Do you believe that men who are not married and are having sex should only have sex with one partner? |  |  |
| 751 | Do you think that most men you know who are not married and are having sex, have sex with only one partner? |  |  |
| 752 | Do you believe that married men should only have sex with their wives? |  |  |
| 753 | Do you think that most married men you know have sex only with their wives? |  |  |
| 754 | Do you believe that young women should wait until they ar, married to have sexual intercourse? |  |  |
| 755 | Do you think that most young women you know wail until they are married to have sexual intercourse? | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ <br> NO $\ldots \ldots \ldots \ldots \ldots$ <br> DKINOT SURE/DEPENDS $\quad . \ldots \ldots .$. |  |
| 756 | Do you believe that women who are not married and are having sex should only have sex with one partner? |  |  |
| 757 | Do you think that most women you know who are not married and are having sex, have sex with only one partner? |  |  |
| 758 | Do you believe that married women should only have sex with their husbands? |  |  |
| 759 | Do you think that most married women you know have sex only with their husbands? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 801 | Some men are circumcised. Are you circumcised? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 805$ |
| 802 | At what age were you circumcised? | BELOW AGE 13 (INFANT/CHILD) . 1 <br> 13-19 YEARS OLD $\ldots \ldots \ldots \ldots \ldots$ 2 <br> 20 OR MORE YEARS $\ldots \ldots \ldots \ldots$. 3 | $\longrightarrow 808$ |
| 803 | Who performed the circumcision? |  |  |
| 804 | What is the main reason you were circumcised? |  |  |
| 805 | Would you want to get circumcised? |  | $\begin{array}{\|l} \longrightarrow 807 \\ \longrightarrow 808 \end{array}$ |
| 806 | What is the main reason you would want to get circumcised? |  | $\rightarrow \rightarrow 808$ |
| 807 | What is the main reason you would not want to get circumcised? |  |  |
| 808 | Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? <br> IF YES: How many injections have you had? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD ' 90 '. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS <br> NONE | $\longrightarrow 812$ |
| 809 | Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? <br> IF NUMBER OF INJECTIONS IS GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD ' 90 '. <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. | NUMBER OF INJECTIONS <br> NONE $\qquad$ | $\longrightarrow 812$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 810 | The last time you had an injection given to you by a health worker, where did you go to get the injection? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE <br> WRITE THE NAME OF THE PLACE. |  |  |
| 811 | Did the person who gave you that injection take the syringe and needle from a new, unopened package? |  |  |
| 812 | Do you currently smoke cigarettes? |  | $\longrightarrow 814$ |
| 813 | In the last 24 hours, how many cigarettes did you smoke? | CIGARETTES . . . . . . . . . . . . . |  |
| 814 | Do you currently smoke or use any other type of tobacco? |  | $\longrightarrow 816$ |
| 815 | What (other) type of tobacco do you currently smoke or use? <br> RECORD ALL MENTIONED. |  |  |
| 816 | Have you ever heard of an illness called tuberculosis or TB? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 820$ |
| 817 | How does tuberculosis spread from one person to another? <br> PROBE: Any other ways? <br> RECORD ALL MENTIONED. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 818 | Can tuberculosis be cured? |  |  |
| 819 | If a member of your family got tuberculosis, would you want it to remain a secret or not? | YES, REMAIN A SECRET $\ldots \ldots . . . . . .$. <br> NO . . . . . . . . . . . . . . . . . . . . . . . . <br> DON'T KNOW/NOT SURE/ <br> DEPENDS . . . . . . . . . . . . . . . . . . . . . |  |
| 820 | Are you covered by any medical aid? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 822$ |
| 821 | What type of medical aid? <br> RECORD ALL MENTIONED. |  |  |
| 822 | Are you the primary care giver for any children? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 826$ |
| 823 | Are any of these children for whom you are the primary caregiver under the age of 18 ? |  | $\rightarrow 826$ |
| 824 | Now I would like to ask you about the child(ren) who (is/are) under the age of 18 and for whom you are the primary caregiver. <br> Have you made arrangements for someone to care for these (this child/these children) in the event that you fall sick or are unable to care for (him/her/them)? |  |  |
| 825 | Are you comfortable talking to the children in your care about sex and HIV/AIDS? |  |  |
| 826 | RECORD THE TIME. |  |  |

COMMENTS ABOUT RESPONDENT:
$\qquad$

COMMENTS ON SPECIFIC QUESTIONS:
$\qquad$

ANY OTHER COMMENTS:
$\qquad$

SUPERVISOR'S OBSERVATIONS


EDITOR'S OBSERVATIONS
$\qquad$




| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 104 |  |  | $\rightarrow$ END |
| 105 | Are you currently attending school? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . | $\longrightarrow 107$ |
| 106 | Have you ever attended school? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . | $\longrightarrow 110$ |
| 107 | What is the highest level of school you attended? |  |  |
| 108 | What is the highest (grade/standard/form) you completed at that level? | GRADE/STANDARD/FORM. . |  |
| 109 | CHECK 107: |  | $\rightarrow 115$ |
| 110 | Now I would like you to read this sentence to me. <br> SHOW CARD TO RESPONDENT. <br> IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me? |  |  |
| 111 | Have you ever been in a program to learn how to read and write? Do not include what you were taught in school. | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 112 | CHECK 110: |  | $\rightarrow 114$ |
| 113 | Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY . . . . . . . . . . . . . . . |  |
| 114 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY . . . . . . . . . . . . . . <br> AT LEAST ONCE A WEEK . . . . . . . . |  |
| 115 | Do you watch television almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY . . . . . . . . . . . . . . . 1 AT LEAST ONCE A WEEK . . . . . . . 2 LESS THAN ONCE A WEEK . . . . . . 3 NOT AT ALL . . . . . . . . . . . . . . . . |  |
| 116 | What is your religion? <br> NAME OF CHURCH |  |  |


| NO. | QUESTIONS AND FILTERS |  | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 201 | Now I am going to ask you some questions about who looks after you when you are at home. Can you tell me the names of all of the persons who look after you when you are at home? <br> RECORD THE NAMES OF THE PERSONS IN 202. CHECK THE HOUSEHOLD SCHEDULE AND RECORD THE LINE NUMBER OF EACH CARETAKER WHO IS LISTED IN THE THE HOUSEHOLD SCHEDULE. IF THE CARETAKER IS NOT INCLUDED IN THE HOUSEHOLD SCHEDULE, RECORD '00'. <br> USE ANOTHER QUESTIONNAIRE IF MORE THAN THREE CARETAKERS ARE MENTIONED. |  |  |  |  |
| 202 | CHECK COLUMNS 1 AND 2 IN THE HOUSEHOLD SCHEDULE | NAME $\qquad$ <br> LINE <br> NUMBER $\square$ | NAME <br> LINE <br> NUMBER | NAME $\qquad$ <br> LINE <br> NUMBER |  |
| 203 | CHECK 202 |  |  | $\begin{aligned} & \text { CODE } \\ & \text { 'OO' } \\ & \\ & \\ & \\ & \end{aligned}$ | THER <br> (SKIP TO <br> 205) |
| 204 | How old is (NAME OF CARETAKER)? |  | AGE DON'T KNOW 98 | AGE DON'T KNOW |  |
| 205 | What is (NAME'S) relationship to you? |  | BIOLOGICAL MOTHER. . . . 01 <br> STEPMOTHER ....... 02 <br> BIOLOGICAL FATHER .. 03 <br> STEPFATHER ........ 04 <br> GRANDMOTHER ........ 05 <br> GRANDFATHER ........ 06 <br> FEMALE SIBLING .... 07 <br> MALE SIBLING ........ 08 <br> AUNT ................. 09 <br> UNCLE ................. 10 <br> OTHER FEMALE <br> RELATIVE ........... . 11 <br> OTHER MALE <br> RELATIVE . . . . . . . . . 12 <br> FATHER'S GIRLFRIEND. . . 13 <br> MOTHER'S BOYFIRIEND. 14 <br> FEMALE NANNY/HIRED <br> CAREGIVER ....... 15 <br> MALE NANNY/HIRED <br> CAREGIVER ....... 16 <br> FEMALE FRIEND/NEIGHBOUR <br> ACQUAINTANCE .... 17 <br> MALE FRIEND/NEIGHBOUR <br> ACQUAINTANCE .... 18 <br> OTHER $\qquad$ 96 | BIOLOGICAL MO STEPMOTHER BIOLOGICAL FAT STEPFATHER GRANDMOTHER GRANDFATHER FEMALE SIBLING MALE SIBLING AUNT UNCLE OTHER FEMALE RELATIVE ... OTHER MALE RELATIVE FATHER'S GIRLF MOTHER'S BOYF FEMALE NANNY/H CAREGIVER MALE NANNY/HIR CAREGIVER FEMALE FRIEND ACQUAINTANC MALE FRIEND/NE ACQUAINTANC OTHER $\qquad$ | THER. . . . 01 <br> ....... 02 <br> HER .. 03 <br> ....... 04 <br> ....... 05 <br> ....... 06 <br> $\begin{array}{rrr} & 07 \\ \ldots & 08\end{array}$ <br> ....... . 09 <br> ....... 10 <br> ....... 11 <br> ....... 12 <br> RIEND. . . 13 <br> IRIEND. 14 <br> HIRED <br> ....... 15 <br> RED <br> NEIGHBOUR <br> C 17 <br> IGHBOUR <br> CE .... 18 $\qquad$ 96 CIFY) |
| 206 | Now I am going to ask some questions about the times you were at home over the past seven days. <br> CHECK 202: |  | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots . & 8 \end{array}$ | $\xrightarrow{\square} 209$ |
| 207 | Was another adult always present in the home when your caregiver(s) was (were) away? |  |  |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 208 | On how many days during the past seven days were you at home at least part of the day without adult supervision? <br> IF EVERYDAY, RECORD '7' | DAYS $\qquad$ $\square$ <br> DON'T KNOW |  |
| 209 | In the past week have you been: <br> Sent out of the home yard on an errand alone? Playing/visiting a friend out of the home yard without adult supervision? |   YES NO <br> SENT ON ERRAND ALONE $\ldots . .$. 1 2 <br> PLAYING/VISITING WITHOUT   <br> ADULT SUPERVISION ........ 1 2 |  |
| 210 | When you go out, are you required to tell your caregiver where you are going always, most of the time, only sometimes, or hardly ever? |  |  |
| 211 | Do you share the room where you sleep? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . | $\longrightarrow 215$ |
| 212 | Who shares the room where you usually sleep? <br> IF ALL HOUSEHOLD MEMBERS SLEEP IN THE SAME ROOM CIRCLE 995. OTHERWISE RECORD THE NAME OF ALL THE INDIVIDUALS SHARING THE ROOM. |  |  |
| 213 | Do you share the bed (mat) where you sleep with any of these persons? |  | $\longrightarrow 215$ |
| 214 | Who usually shares the bed (mat) with you? <br> IF ALL PERSONS SHARING THE ROOM SLEEP IN THE SAME BED (MAT) AS THE RESPONDENT, CIRCLE 998. OTHERWISE RECORD THE NAME OF ALL THE INDIVIDUALS WHO USUALLY SHARING THE BED (MAT). |  |  |
| 215 | CHECK 105: |  | 301 |
| 216 | Does your caregiver or another adult accompany you from home to school each day? | YES, CAREGIVER  . . . . . . . . . . . . . . 1 <br> YES, OTHER ADULT 2   <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 3   |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 217 | Does your caregiver or another adult accompany you from school to home each day? |  |  |
| 218 | Do you walk to school or do you use transport to get there? | $\qquad$ |  |
| 219 | At your school is there: <br> A teacher or other adult always present in the classroom? <br> A teacher or other adult always watching when children are coming to or leaving school? <br> A teacher or other adult monitoring the toilets? <br> A teacher or other adult checking that no unauthorized person enters the school? |   YES NO <br> ALWAYS IN CLASSROOOM. . . 1 2  <br> WATCHING CHILDREN <br> COMING/LEAVING   1 |  |

SECTION 3. KNOWLEDGE AND ATTITUDES ABOUT SEX

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 301 | Now I would like to talk about something else. Do you know what it means to have sex? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 304$ |
| 302 | Has your parent (caregiver) ever talked to you about sex? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . .  |  |
| 303 | Has your parent or caregiver ever talked to you about sexual abuse? |  |  |
| 304 | Have you ever attended a life skills course <br> at school? <br> anywhere else? |   YES NO   <br> SCHOOL $\ldots \ldots \ldots \ldots \ldots$ 1 2  <br> ELSEWHERE     <br>    2  |  |
| 305 | Do you agree or disagree with the following statements: <br> It is acceptable for a boy to have many girlfriends <br> It is acceptable for a girl to have many boyfriends |  YES NO DK  <br> BOY MANY GIRLFRIENDS . 1 2 3 <br> GIRL MANY BOYFRIENDS . 1 2 3 |  |
| 306 | CHECK 301: |  | $\rightarrow 308$ |
| 307 | Do you agree or disagree with the following statements: <br> If a boy proposes love, a girl cannot refuse sex <br> If a boy gives a girl presents, she cannot refuse sex <br> Boys should decide when, where and how to have sex |  YES NO DK  <br> WHEN BOY PROPOSES    <br> LOVE $\ldots \ldots \ldots \ldots \ldots$. 1 2 3 <br> WHEN BOY GIVES    <br> PRESENTS $\ldots \ldots \ldots \ldots$. 1 2 3 <br> BOY DECIDES ABOUT SE>. 1 2 3 |  |
| 308 | Are you circumcised? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . | $\longrightarrow 401$ |
| 309 | At what age? | AGE IN YEARS <br> DON'T KNOW $98$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 401 | Now I would like to talk about something else. Have you ever heard of an illness called AIDS? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . | $\rightarrow 404$ |
| 401A | Is there anything else a person can do to avoid or reduce the chances of getting the AIDS virus? |  | $\longrightarrow 403$ |
| 402 | What can a person do? <br> Anything else? <br> RECORD ALL WAYS MENTIONED. |  |  |
| 403 | Is it possible for a healthy-looking person to have the AIDS virus? |  |  |
| 404 | Have you ever heard about MALE condoms? |  |  |
| 404A | Have you ever heard about FEMALE condoms? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 NO . . . . . . . . . . . . . . . . . . 8 |  |
| 404B | CHECK 401: <br> HAS HEARD HAS NOT HEARD OF AIDS OF AIDS |  | - 420 |
| 404C | CHECK 404 AND 404A: <br> AT LEAST <br> OTHER ONE YES |  | 405A |
| 405 | Should children your age be taught about using a condom to avoid AIDS? |  |  |
| 405A | CHECK 301: <br> DOES NOT KNOW MEANING OF SEX |  | $\rightarrow 407$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 406 | Should children your age be taught in school about waiting until they get married before having sex in order to avoid AIDS? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . 8 |  |
| 407 | Have you received HIVIAIDS information from: <br> Television? <br> Radio? <br> Newspaper? <br> Magazine? <br> Leaflets? <br> Posters? <br> Billboards? |  |  |
| 408 | Have you seen any of the following items in the last 12 months carrying HIV/AIDS information or messages: <br> Stickers? <br> Clothing such as a T -shirt or cap? <br> Red ribbon badge? <br> Sign on a bus or mini kombi? <br> Painted wall mural? <br> AIDS play? |  |  |
| 409 | Have you received HIV/AIDS information from any of the following places in the last 12 months: <br> At school? <br> At a Youth Club? <br> A community meeting? <br> A religious meeting? <br> Health facility? <br> Doctor's office? <br> Pharmacy or chemist? <br> AIDS organization? <br> Local shop or spaza shop? |  |  |
| 410 | Thinking of HIV/AIDS information that you have received in the last 12 months, do you think: <br> there is too much focus on condoms? there is not enough information for your age group? some of the messages are offensive or upsetting? the messages are confusing? |  YES NO DK  <br> TOO MUCH ON CONDOMS 1 2 3 <br> NOT ENOUGH INFO $\ldots \ldots$ 1 2 3 <br> OFFENSIVE/UPSETTING 1 2 3 <br> CONFUSING $\ldots . . . . . . .$. 1 2 3 |  |
| 410A | CHECK 301: |  |  |
| 410B | Thinking of HIV/AIDS information that you have received in the last 12 months, do you think: <br> there is too much focus on abstinence? <br> there is too much focus on sex? <br> they encourage young people to have sex? <br> they teach young children that sex is okay as long as it is safe? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 411 | Are you aware of the existence of any telephone or help line that gives HIV/AIDS information? | $\begin{aligned} & \text { YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 2 \end{aligned}$ | $\rightarrow 413$ |
| 412 | Which ones do you know of? <br> RECORD ALL MENTIONED. | AIDS HELPLINE $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ TASC $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ OTHER $\ldots \ldots \ldots$ |  |
| 413 | Has your parent/caregiver ever talked with you about HIV/AIDS? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . 2 |  |
| 414 | Do other kids you mix with talk about HIV/AIDS? | $\begin{aligned} & \text { YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 1 \\ & \text { NO . . . . . . . . . . . . . . } \end{aligned}$ |  |
| 415 | Have you spoken to someone in the past month about HIV/AIDS? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . | $\rightarrow 417$ |
| 416 | Who have you spoken with? <br> RECORD ALL MENTIONED. | RELATIVE <br> BROTHER/SISTER ................. . A <br> PARENT . . . . . . . . . . . . . . . . . . . . . . . B <br> GRANDPARENT . . . . . . . . . . . . . . . . C <br> OTHER RELATIVE ................. D <br> NONRELATIVE <br> NONRELATIVE CAREGIVER <br> BOYFRIEND/GIRLFRIEND <br> FRIEND <br> TEACHER <br> DOCTOR/NURSE <br> COMMUNITY LEADER/ <br> POLITICIAN <br> AIDS ORGANIZATION <br> PEER EDUCATOR <br> COMMUNITY HEALTH WORKEF . . . M <br> TBA. <br> ........................... N <br> TRADITIONAL HEALEI . . . . . . . . . . . . O <br> OTHER $\qquad$ X |  |
| 417 | Who would you like to talk to about HIV/AIDS? <br> RECORD ALL MENTIONED. | RELATIVE <br> BROTHER/SISTER .................. A <br> PARENT ............................ . . <br> GRANDPARENT .................... . C <br> OTHER RELATIVE .................. D <br> NONRELATIVE <br> NONRELATIVE CAREGIVER <br> BOYFRIEND/GIRLFRIEND <br> FRIEND <br> TEACHER <br> DOCTOR/NURSE <br> COMMUNITY LEADER/ <br> POLITICIAN <br> AIDS ORGANIZATION <br> PEER EDUCATOR <br> COMMUNITY HEALTH WORKEF... M <br> TBA................................ . . . N <br> TRADITIONAL HEALEI . . . . . . . . . . . . O <br> OTHER $\qquad$ X |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 418 | Do you know of a place where people can go to get tested for the AIDS virus? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 420$ |
| 419 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. |  |  |
| 420 | RECORD THE TIME. | HOUR <br> MINUTES |  |

# TO BE FILLED IN AFTER COMPLETING INTERVIEW 

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:
$\qquad$
$\qquad$
$\qquad$
$\square$

ANY OTHER COMMENTS:
$\qquad$

SUPERVISOR'S OBSERVATIONS
$\qquad$

EDITOR'S OBSERVATIONS
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
NAME OF EDITOR: DATE: $\qquad$


## INFORMED CONSENT

Hello. My name is and I am working with the Central Statistical Office
We are conducting a national survey about the health ofmen, women and children. We would very much appreciate participation in this survey. I would like to ask you about your health (and the health of your children). This informatior will help the government to plan health services. The survey usually takes betweenabout 30 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions However, we hope that you will participate in this survey since your views are important

At this time, do you want to ask me anything about the survey?
May I begin the interview now?

| Signature of interviewer: |  |  |  | $2 \rightarrow$ END |
| :---: | :---: | :---: | :---: | :---: |
| RESPONDENT AGREES TO BE INTERVIEWED 1 RESPONDENT DOES NOT AGREE TO BE . |  |  |  |  |
| NO. | QUESTIONS AND FILTERS | CODING CA | ATEGORIES | SKIP |
| 101 | RECORD THE TIME. | HOUR <br> MINUTES |  |  |
| 102 | How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? <br> IF LESS THAN ONE YEAR, RECORD '00' YEARS. | YEARS <br> ALWAYS <br> VISITOR |  | $\xrightarrow{\longrightarrow} 104$ |
| 103 | Just before you moved here, did you live in a city, in a town, or in the countryside? | CITY TOWN COUNTRYSIDE | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 104 | In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away? | NUMBER OF TRIPS <br> NONE |  | $\longrightarrow 106$ |
| 105 | In the last 12 months, have you been away from your home community for more than one month at a time? |  |  |  |
| 106 | In what month and year were you born? | MONTH <br> DON'T KNOW MONTH <br> YEAR <br> DON'T KNOW YEAR |  |  |
| 107 | How old were you at your last birthday? <br> COMPARE AND CORRECT 106 AND/OR 107 IF INCONSISTENT. | AGE IN COMPLETED YEARS |  |  |
| 108 | Have you ever attended school? |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 112$ |
| 109 | What is the highest level of school you attended: primary, secondary, or higher? | LOWER PRIMARY HIGHER PRIMARY SECONDARY <br> HIGH SCHOOL TERTIARY | $\begin{array}{r} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{array}$ |  |
| 110 | What is the highest (grade/form/year) you completed at that level? | GRADE/FORM/YEAR | $\ldots$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 111 | CHECK 109: <br> ANY PRIMARY <br> SECONDARY <br> CODE '1' OR '2' OR HIGHER $\square$ CIRCLED CODE '3' OR '4' OR 5 |  | $\longrightarrow 115$ |
| 112 | Now I would like you to read this sentence to me. <br> SHOW CARD TO RESPONDENT. <br> IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: <br> Can you read any part of the sentence to me? | CANNOT READ AT ALL ............ 1 <br> ABLE TO READ ONLY PARTS OF <br> SENTENCE <br> ABLE TO READ WHOLE <br> SENTENCE ...................... 3 <br> NO CARD WITH REQUIRED <br> LANGUAGE $\qquad$ 4 <br> (SPECIFY) <br> BLIND/VISUALLY IMPAIRED |  |
| 113 | Have you ever participated in a literacy program or any other program that involves learning to read or write (not including primary school)? |  |  |
| 114 | CHECK 112: |  | $\rightarrow 116$ |
| 115 | Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all? | ALMOST EVERY DAY $\ldots . . .$. 1 <br> AT LEAST ONCE A WEEK $\ldots .$. 2 <br> LESS THAN ONCE A WEEK $\ldots$. 3 <br> NOT AT ALL $\ldots . . . . . . . . . . . . . . . . . . . ~$ 4  |  |
| 116 | Do you listen to the radio almost every day, at least once a week, less than once a week or not at all? |  |  |
| 117 | Do you watch television almost every day, at least once a week less than once a week or not at all? | ALMOST EVERY DAY    <br> AT LEAST ONCE A WEEK ... 1  <br> LESS THAN ONCE A WEEK $\ldots$. 2  <br> NOT AT ALL $\ldots . . . . . . . . . . . . . . . . . . . . . . . ~$ 4  |  |
| 118 | Are you currently working? |  | $\longrightarrow 121$ |
| 119 | Have you done any work in the last 12 months? |  | $\longrightarrow 121$ |
| 120 | What have you been doing for most of the time over the last 12 months? | GOING TO SCHOOL/STUDYING  1 <br> LOOKING FOR WORK $\ldots \ldots \ldots \ldots$ 2  <br> RETIRED $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 3  <br> UNABLE TO WORK, ILL/ $\ldots \ldots \ldots$. 4 <br> HANDICAPPED $\ldots \ldots \ldots \ldots$ 5  <br> HOUSEWORK/CHILDCARE $\ldots \ldots$ 5 <br> OTHER   <br>    | $\rightarrow 122$ |
| 121 | What is your occupation, that is, what kind of work do you mainly do? | $\qquad$ |  |
| 122 | What is your religion? <br> NAME OF CHURCH |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 201 | CHECK COVER: RESPONDENT IS A <br> WOMAN <br> MAN $\square$ |  | 301 |
| 202 | Are you currently living with a man as if married? | YES, CURRENTLY MARRIED YES, LIVING WITH A MAN NO, NOT IN UNION | $\xrightarrow{\longrightarrow} 205$ |
| 203 | Have you ever been married or lived together with a man as if married? | YES, FORMERLY MARRIED YES, LIVED WITH A MAN NO | $\longrightarrow 213$ |
| 204 | What is your marital status now: are you widowed, divorced, or separated? | WIDOWED DIVORCED SEPARATED | $\rightarrow 210$ |
| 205 | Is your husband/partner living with you now or is he staying elsewhere? | LIVING WITH HER STAYING ELSEWHERE |  |
| 206 | RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. <br> IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00' | NAME $\qquad$ <br> LINE NO. |  |
| 207 | Besides yourself, does your husband/partner have other wives or does he live with other women as if married? |  | $\xrightarrow{\longrightarrow} 210$ |
| 208 | Including yourself, in total, how many other wives or partners does your husband live with as if married? | TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS DON'T KNOW |  |
| 209 | Are you the first, second, ... wife? | RANK <br> NO RANK |  |
| 210 | Have you been married or lived with a man only once or more than once? | ONLY ONCE <br> MORE THAN ONCE |  |
| 211 | CHECK 210: <br> In what month and year did you start living with your husband/partner? <br> MARRIED/ LIVED WITH A MAN MORE THAN ONCE <br> Now I would like to ask about when you started living with your first husband/partner. In what month and year was that? | MONTH <br> DON'T KNOW MONTH <br> YEAR <br> DON'T KNOW YEAR | $\longrightarrow 213$ |
| 212 | How old were you when you first started living with him? | AGE |  |
| 213 | CHECK FOR THE PRESENCE OF OTHERS. <br> BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE | ACY. |  |
| 214 | Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life isues. <br> How old were you when you had sexual intercourse for the very first time? | NEVER HAD SEXUAL <br> INTERCOURS <br> AGE IN YEARs. $\qquad$ <br> FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNEF . | $\longrightarrow 401$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 215 | Now I would like to ask you some questions about your recent sex Let me assure you again that your answers are completely confid If we should come to any question that you don't want to answe the next question. | activity. <br> al and will not be told to anyone. let me know and we will go to |  |  |
| 215A | When was the last time you had sexual intercourse? <br> IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. <br> IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS. |  |  | $\rightarrow 220$ |
| 216 | The last time you had sexual intercourse, was a condom used? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & \ldots .{ }^{1} \\ & \ldots \ldots .{ }^{2} \end{aligned}$ |  |
| 217 | Was a condom used every time you had sexual intercourse in the last 12 months? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & \ldots . . .1 \\ & \ldots . . \\ & \hline \end{aligned}$ |  |
| 218 | What was your relationship to this person with whom you had the last sexual intercourse? <br> IF BOYFRIEND: Were you living together as if married? <br> IF YES, CIRCLE '02' <br> IF NO, CIRCLE '03' | HUSBAND <br> LIVE-IN PARTNER <br> PARTNER NOT LVING WITH RESPONDENT CASUAL ACQUINTANCE COMMERCIAL SEX WORKER OTHER $\qquad$ | $\begin{array}{ccc} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 3 \\ \ldots \ldots & 4 \\ \ldots & 5 \\ & 6 \\ \hline \end{array}$ | $\longrightarrow 221$ |
| 219 | For how long have you had/did you have a sexual relationship with this person? <br> IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS. |  |  |  |
| 220 | The last time you had sexual intercourse with this person, did you or this person drink alcohol or any other intoxicating substance? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & \ldots . . .1 \\ & \ldots . . \\ & \hline \end{aligned}$ | $\rightarrow$ 221A |
| 221 | Were you or your partner drunk at that time? <br> IF YES: Who was drunk? | RESPONDENT ONLY <br> PARTNER ONLY RESPONDENT AND PARTNER BOTH NEITHER | $\begin{aligned} & \ldots \ldots . \\ & \ldots \ldots \\ & \ldots \\ & \ldots \\ & \ldots \ldots . \\ & \ldots \end{aligned}$ |  |
| 221A | CHECK 215A: <br> HAS HAD SEXUAL INTERCOURSE IN LAST 12 MONTHS (CODE 1,2,3) | AD SEXUAL ERCOURSE 12 MONTHS (CODE 4) |  | 224 |
| 222 | Apart from this person, have you had sexual intercourse with any other person in the last 12 months? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{gathered} \ldots . . \\ \ldots \\ \ldots \end{gathered}$ | $\longrightarrow 224$ |
| 223 | In total, with how many different people have you had sexual intercourse in the last 12 months? <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. <br> IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.' | NUMBER OF PARTNERS LAST 12 MONTHS <br> DON'T KNOW | 98 |  |
| 224 | In total, with how many different people have you had sexual intercourse in your lifetime? <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. <br> IF NUMBER OF PARTNERS IS GREATER THAN 95, WRITE '95.' | NUMBER OF PARTNERS IN LIFETIME DON'T KNOW |  | $\longrightarrow 401$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 301 | Are you currently married or living with a woman as if married? | YES, CURRENTLY MARRIED YES, LIVING WITH A WOMAN NO, NOT IN UNION | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | $\rightarrow 308$ |
| 302 | Is your wife/partner living with you now or is she staying elsewhere? | LIVING WITH HIM. . . . . . . . . . STAYING ELSEWHERE | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 303 | CHECK 301: <br> CURRENTLY <br> MARRIED <br> LIVING WITH A WOMAN |  |  | $\rightarrow 306$ |
| 304 | Do you have one wife or more than one wife? <br> IF ONLY ONE WIFE, RECORD '01’. <br> IF MORE THAN ONE, ASK: <br> How many wives do you currently have? | NUMBER OF WIVES |  |  |
| 305 | Are there any other women with whom you live as if married? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 307$ |
| 306 | Are you living with one (other) woman or more than one (other) woman as if married? <br> IF ONLY ONE LIVE-IN PARTNER, RECORD ‘01'. <br> IF MORE THAN ONE, ASK: <br> How many women are you living with as if married? | NUMBER OF LIVE-IN PARTNERS |  |  |
| 307 | Apart from the woman/women you have already mentioned, do you currently have any other regular or occasional sexual partners? | REGULAR PARTNER(S) ONLY OCCASIONAL PARTNER(S) ONLY <br> REGULAR AND OCCASIONAL PARTNERS NO SEXUAL PARTNER | 1 <br> 2 <br> 3 <br> 4 | $] \rightarrow 311$ |
| 308 | Do you currently have any regular sexual partners, occasional sexual partners, or do you have no sexul partner at all? | REGULAR PARTNER(S) ONLY OCCASIONAL PARTNER(S) ONLY <br> REGULAR AND OCCASIONAL PARTNERS NO SEXUAL PARTNER | 1 <br> 2 <br> 3 <br> 4 |  |
| 309 | Have you ever been married or lived with a woman? | YES, FORMERLY MARRIED ONLY <br> YES, LIVED WITH A WOMAN ONLY <br> YES, BOTH <br> NO | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ | $\begin{array}{r} \longrightarrow 314 \\ \longrightarrow 319 \end{array}$ |
| 310 | What is your marital status now: are you widowed, divorced, or separated? | WIDOWED <br> DIVORCED <br> SEPARATED | 1 2 3 | $\xrightarrow{\longrightarrow} 314$ |
| 311 | WRITE THE LINE NUMBERS FROM THE HOUSEHOLD Q WIFE/PARTNER REPORTED IN QUESTIONS 304 AND 306 NOT LISTED IN THE HOUSEHOLD SCHEDULE, RECORD THE NUMBER OF LINES FILLED IN MUST BE EQUAL TO AND PARTNERS . (IF RESPONDENT HAS MORE THAN FIV USE ADDITIONAL QUESTIONNAIRE(S). CHANGE THE W NUMBER TO 6, 7, 8, 9 AND 10). | NAIRE FOR EACH F A WIFE/PARTNER IS HE LINE NUMBER BOXES. MBER OF WIVES ES/PARTNERS NER |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 312 | CHECK: 304 AND 306 SUM OF <br> 304 AND $306>01$ <br> SUM OF <br> 304 AND $306=01$ <br> Please tell me the name of <br> your wife/partner. Please tell me the name of <br> each (wife/partner that you <br> live with as if married), <br> starting with the one you <br> lived with first. <br> WIFE/ <br> PARTNER <br> NUMBER  <br> 1  <br> 2  | LINE NUMBER IN HH. QUEST. | STATUS <br> WIFE $=1$ <br> PART- <br> NER= 2 <br> 1 <br> 2 <br> 1 <br> 2 <br> 1 <br> 2 <br> 1 <br> 2 <br> 1 <br> 2 | 312A <br> How old was your wife/ partner on her last birthday? <br> AGE |  |
| 313 | CHECK 312: <br> ONLY ONE WIFE/ PARTNER <br> MORE THAN ONE WIFE/PARTNER |  |  |  | 315 |
| 314 | Have you been married or lived with a woman only once or more than once? | ONCE MORE | ONCE | $\begin{array}{ll} \ldots & \ldots \\ \ldots . . & 1 \\ \ldots & 2 \end{array}$ | $\begin{array}{r} \longrightarrow 317 \\ \longrightarrow 316 \end{array}$ |
| 315 | Have you ever been married to or lived as if married to any woman other than those you have just mentioned? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{array}{ll} \ldots \ldots . . & 1 \\ \ldots \ldots . . & 2 \end{array}$ | $\rightarrow 317$ |
| 316 | In total, how many women have you been married to or lived with as if married in your whole life? | NUMB WOM |  |  |  |
| 317 | CHECK 312 AND 313: | MONTH <br> DON'T <br> YEAR <br> DON'T | W MONTH <br> W YEAR |     <br> $\ldots .$    | $\longrightarrow 319$ |
| 318 | How old were you when you started living with her? | AGE |  |  |  |
| 318A | CHECK FOR THE PRESENCE OF OTHERS. <br> BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE | RIVACY. |  |  |  |
| 319 | Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. <br> How old were you when you first had sexual intercourse (if ever)? | NEVER <br> AGE IN <br> FIRST <br> LIVIN <br> WIFE | RS <br> WHEN STAR ITH FIRST RTNER |  | $\rightarrow 401$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGO | RIES | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 320 | Now I would like to ask you some questions about your recent sexual activity. <br> Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question. |  |  |  |
| 320A | When was the last time you had sexual intercourse? <br> IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. <br> IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS. |  |  | $\rightarrow 324$ |
| 321 | The last time you had sexual intercourse, was a condom used? | YES NO | $\begin{array}{ll} \ldots . . & 1 \\ \ldots . & 2 \end{array}$ | $\rightarrow 322 \mathrm{~A}$ |
| 322 | What was the main reason you used a condom on that occasion? | RESP. WANTED TO PREVENT STD/HIV <br> RESP. WANTED TO PREVENT PREGNANCY <br> RESP. WANTED TO PREVENT BOTH STD/HIV AND PREGNANCY <br> DID NOT TRUST PARTNER/FELT PARTNER HAD OTHER PARTNERS <br> PARTNER REQUESTED/ INSISTED <br> OTHER | $\ldots \ldots$ 1 <br> $\ldots .$. 2 <br>   <br> $\ldots .$. 3 <br> $\ldots$  <br> $\ldots .$. 4 <br> $\ldots$ 6 <br> $\ldots$ 8 | $\longrightarrow 323$ |
| 322A | What was the main reason a condom was not used on that occasion? | NOT AVAILABLE. . . . . . . . . . . . . . <br> NOT NECESSARY <br> NOT THOUGHT OF <br> PARTNER REFUSED. <br> REDUCES PLEASURE. <br> OTHER $\qquad$ <br> (SPECIFY) | $\begin{array}{cc} \ldots . . . & 1 \\ & 2 \\ \ldots .03 & 3 \\ \ldots .04 & 4 \\ \ldots .05 & 5 \\ \ldots & 06 \\ \ldots-n \end{array}$ | $\rightarrow 324$ |
| 323 | Did you use a condom every time you had sexual intercourse with this person in the last 12 months? | YES NO | $\begin{array}{ll}  & \\ \ldots . & 1 \\ \ldots . & 2 \end{array}$ |  |
| 324 | The last time you had sexual intercourse with this person, did you or this person drink alcohol or any other intoxicating substance? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{cc} \ldots . . & 1 \\ \ldots . . & 2 \end{array}$ | $\longrightarrow 326$ |
| 325 | Were you or your partner drunk at that time? <br> IF YES: Who was drunk? | RESPONDENT ONLY <br> PARTNER ONLY <br> RESPONDENT AND PARTNER <br> BOTH <br> NEITHER | $\begin{array}{cc} \ldots \ldots . & 1 \\ \ldots \ldots . & 2 \\ & \\ \ldots \ldots . & 3 \\ \ldots \ldots . & 4 \end{array}$ |  |
| 326 | What was your relationship to this person with whom you had the last sexual intercourse? <br> IF PARTNER: Were you living together as if married? <br> IF YES, CIRCLE '2' <br> IF NO, CIRCLE '3' | HUSBAND <br> LIVE-IN PARTNER <br> PARTNER NOT LIVING WITH RESPONDENT CASUAL ACQUINTANCE COMMERCIAL SEX WORKER OTHER | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 3 \\ \ldots \ldots & 4 \\ & 5 \\ & 6 \end{array}$ | $\longrightarrow 328$ |
| 327 | For how long have you had/did you have a sexual relationship with this person? <br> IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS. |  |   <br>   <br>   <br>   |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 401 | Now I would like to talk about something else. Have you ever heard of an illness called AIDS? |  | $\longrightarrow 501$ |
| 402 | Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other partners? |  |  |
| 403 | Can people get the AIDS virus from mosquito bites? |  |  |
| 404 | Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex? |  |  |
| 405 | Can people get the AIDS virus by sharing food with a person who has AIDS? |  |  |
| 406 | Can people reduce their chance of getting the AIDS virus by abstaining from sexual intercourse? |  |  |
| 407 | Can people get the AIDS virus because of witchcraft or other supernatural means? |  |  |
| 408 | Can people get the AIDS virus from having anal sex? |  |  |
| 409 | Can people get the AIDS virus from having oral sex? |  |  |
| 410 | Can people get the AIDS virus from open wounds or sores of an infected person? |  |  |
| 411 | Is there anything else a person can do to avoid or reduce the chances of getting the AIDS virus? |  | $\longrightarrow 413$ |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 421 | I don't want to know the results, but did you get the results of the test? |  | $\longrightarrow 422$ |
| 421A | How long after the test did you get the results? |  |  |
| 422 | Where was the test done? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. <br> WRITE THE NAME OF THE PLACE. |  | $\prod_{\rightarrow 425}$ |
| 423 | Do you know of a place where people can go to get tested for the AIDS virus? |  | $\rightarrow 425$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 424 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). <br> WRITE THE NAME OF THE PLACE. |  |  |
| 425 | Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus? | YES $\ldots . .$. ... . <br> NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1  <br> DON'T KNOW . . . . . . . . . . . . . . 8  |  |
| 426 | If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not? | YES, REMAIN A SECRET $\ldots . . .$. 1 <br> NO . . . . . . . . . . . . . . . . . . . . . . . 2  <br> DK/NOT SURE/DEPENDS ....... 8 |  |
| 427 | If a member of your family became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household? |  |  |
| 428 | In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school? | SHOULD BE ALLOWED   ..... <br> SHOULD NOT BE ALLOWED 1   <br> DK/NOT SURE/DEPENDS $\ldots . .$. 2  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 501 |  |  | $\longrightarrow 504$ |
| 502 | If a man has a sexually transmitted disease, what signs or symptoms might he have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |
| 503 | If a woman has a sexually transmitted disease, what signs or symptoms might she have? <br> Any others? <br> RECORD ALL SYMPTOMS MENTIONED. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 504 | CHECK COVER: RESPONDENT IS A <br> WOMAN <br> MAN |  | 511 |
| 505 | CHECK 215A: <br> HAS HAD SEXUAL INTERCOURSE IN LAST 12 MONTHS (CODE 1, 2, 3) |  | 523 |
| 507 |  |  | 523 |
| 507A | CHECK FOR THE PRESENCE OF OTHERS. <br> BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY. |  |  |
| 508 | Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact? |  |  |
| 509 | Sometimes women experience a bad smelling abnormal genital discharge. <br> During the last 12 months, have you had a bad smelling abnormal genital discharge? |  |  |
| 510 | Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer? |  | $\longrightarrow 516$ |
| 511 | HAS NOT HAD SEXUAL <br> INTERCOURSE IN LAST 12 MONTHS <br> (CODE 4 |  | $\rightarrow 523$ |
| 512 | CHECK 501: <br> HEARD ABOUT INFECTION <br> HAS NOT HEARD <br> TRANSMITTED THROUGH INFECTION TRANS SEXUAL CONTACT THROUGH SEXUAL CO | $\begin{aligned} & \text { UT } \\ & \text { ED } \\ & \text { CT } \end{aligned}$ | 523 |
| 512A | CHECK FOR THE PRESENCE OF OTHERS. <br> BEFORE CONTINUING, MAKE EVERY EFFORT TO EN | PRIVACY. |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 513 | Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact? |  |  |
| 514 | Sometimes men experience an abnormal discharge from their penis. <br> During the last 12 months, have you had an abnormal discharge from your penis? |  |  |
| 515 | Sometimes men have a sore or ulcer or near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis? |  |  |
| 516 | CHECK 508, 509, AND 510 FOR WOMAN OR 513, 514, <br> HAS NOT HAD AN INFECTION OR DOES NOT KNOW | 515 FOR MAN: | $\rightarrow 523$ |
| 517 | The last time you had (PROBLEM FROM 507/508/509 for woman or PROBLEM FROM 513/514/515 for man), did you seek any kind of advice or treatment? | YES. . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad 1$ NO . . . . . . . . . . . . . . . . . | $\longrightarrow 519$ |
| 518 | Where did you go? <br> Any other place? <br> RECORD ALL SOURCES MENTIONED. |  | $520$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 519 | Why was treatment not sought for the (PROBLEM(S) in FROM 508/509/510 for woman or PROBLEM FROM 513/514/515 for man)? | NOT NECESSARY EXPENSIVE RELIGIOUS PROHIBITION <br> OTHER $\qquad$ SPECIFY | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 6 \end{aligned}$ |  |
| 520 | When you had (PROBLEM(S) FROM 508/509/510 FOR WOMAN OR PROBLEM(S) FROM 513/514/515 FOR MAN), did you inform the person(s) with whom you were having sex? | YES <br> NO <br> SOME/ NOT ALL <br> DID NOT HAVE A PARTNER | 1 2 3 . |  |
| 521 | When you had (PROBLEM(S) FROM 508/509/510 FOR WOMAN OR PROBLEM (S) FROM 513/514/515 FOR MAN), did you do anything to avoid infecting your sexual partner(s)? | YES <br> NO <br> PARTNER(S) ALREADY <br> INFECTED |  | $\xrightarrow{\longrightarrow} 523$ |
| 522 | What did you do to avoid infecting your partner(s)? Did you.... <br> Use medicine? <br> Stop having sex? <br> Use a condom when having sex? |  YES  <br> USE MEDICINE $\ldots .$. 1 <br> STOP SEX $\ldots . .$. 1 <br> USE CONDOM $\ldots .$. 1 | NO 2 2 2 |  |
| 523 | RECORD THE TIME. | HOUR <br> MINUTES |  |  |

# TO BE FILLED IN AFTER COMPLETING INTERVIEW 

COMMENTS ABOUT RESPONDENT:

## COMMENTS ON SPECIFIC QUESTIONS:

$\qquad$

## ANY OTHER COMMENTS:

$\qquad$

SUPERVISOR'S OBSERVATIONS
$\qquad$

EDITOR'S OBSERVATIONS

NAME OF EDITOR: $\qquad$ DATE: $\qquad$


[^0]:    ${ }^{1}$ The repetition rate is the percentage of students in a given grade in the previous school year who are repeating that grade in the current school year. ${ }^{2}$ The dropout rate is the percentage of students in a given grade in the previous school year who are not attending school in the current school year.

[^1]:    ${ }^{1}$ The categorisation into improved and non-improved follows that proposed by the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation (WHO and UNICEF, 2004).

[^2]:    ${ }^{2}$ The sentence is: "The radio programme on health issues is brought to you by Muhle Dlamini."

[^3]:    Note: Figures in parentheses are based on 25-49 unweighted cases.
    1 "Currently employed" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave,

[^4]:    Note: "Currently employed" includes women and men who indicated they were currently working at the time of the survey. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases.

[^5]:    Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview.

[^6]:    ${ }^{1}$ Excludes women who had sexual intercourse within the last 4 weeks
    ${ }^{2}$ Excludes women who are not currently married

[^7]:    Note: Estimates are based on status at the time of the survey.
    na $=$ Not applicable
    Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

[^8]:    ${ }^{1}$ Unmet need for spacing includes pregnant women whose pregnancy was mistimed; amenorrhoeic women who are not using family planning and whose last birth was mistimed, or whose last birth was unwanted but now say they want more children; and fecund women who are neither pregnant nor amenorrhoeic, who are not using any method of family planning, and say they want to wait 2 or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth. Unmet need for limiting refers to pregnant women whose pregnancy was unwanted; amenorrhoeic women who are not using family planning, whose last child was unwanted, and who do not want any more children; and fecund women who are neither pregnant nor amenorrhoeic, who are not using any method of family planning, and who want no more children.
    ${ }^{2}$ Using for spacing is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

[^9]:    Note: Total includes two births with information missing on birth size.
    ${ }^{1}$ Based on either a written record or the mother's recall

[^10]:    Note: Total includes three births with information missing on toilet facility.
    ${ }^{1}$ Includes child using toilet/latrine, put/rinsed stools into toilet or latrine, and buried
    ${ }^{2}$ Non-shared facilities that are of the types: flush or pour flush toilet and ordinary or ventilated improved privy

[^11]:    Note: Breastfeeding status and food consumed refer to a 24 -hour period (yesterday and the past night). An asterisk indicates that an estimate is based on fewer than 25 unweighted children and has been suppressed.
    ${ }^{1}$ Other milk includes fresh, tinned, and powdered cow or other animal milk.
    ${ }^{2}$ Doesn't include plain water
    ${ }^{3}$ Includes fortified baby food, porridge, and gruel
    ${ }^{4}$ Includes pumpkin, carrots, red sweet potatoes; dark green leafy vegetables such as cassava leaves, spinach, okra, and blackjack and pumpkin leaves; fruits such as mangoes, papayas, oranges, and guavas

[^12]:    ${ }^{1}$ Food groups used in the assessment of minimum standard of feeding practices include: infant formula, milk other than breast milk, cheese or yogurt or other milk products; foods made from grains, roots, and tubers including porridge and fortified baby food from grains; fruits and vegetables rich in vitamin A; other fruits and vegetables; eggs; meat, poultry, fish, and shellfish (and organ meats); beans, peas, and nuts; and foods made with oil, fat, or butter.

[^13]:    Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilogrammes to the square of height in metres $\left(\mathrm{kg} / \mathrm{m}^{2}\right)$.

[^14]:    Note: Foods consumed in the past 24-hour period (yesterday and the past night).
    ${ }^{1}$ Includes pumpkin, carrots, red sweet potatoes; dark green leafy vegetables such as cassava leaves, spinach, okra, and blackjack and pumpkin leaves; fruits such as mangoes, papayas, oranges, and guavas

[^15]:    ${ }^{2}$ Haemoglobin measurements that are not adjusted for the altitude of the enumeration area or the smoking status of the respondent yield a nearly imperceptible difference in the level of anaemia compared with the adjusted estimates (30.3 percent instead of 30.4 percent for women and 13.0 percent instead of 13.2 percent for men).

[^16]:    ${ }^{1}$ An ever-treated net is a pretreated or a non-pretreated net which has subsequently been soaked with insecticide at any time.
    ${ }^{2}$ An insecticide-treated net (ITN) is 1) a factory-treated net that does not require any further treatment, 2) a pretreated net obtained within the past 12 months, or 3) a net that has been soaked with insecticide within the past 12 months.

[^17]:    ${ }^{1}$ Two most common local misconceptions: AIDS can be transmitted by mosquito bites and by sharing food with a person who has AIDS.
    ${ }^{2}$ Comprehensive knowledge means knowing that consistent use of condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

[^18]:    Note: Figures in parentheses are based on 25-49 unweighted cases.
    ${ }^{1}$ Sexual intercourse with a non-marital, non-cohabiting partner
    ${ }^{2}$ Friends, family members, and home are not considered a source for condoms.

[^19]:    Note: Figures in parentheses are based on 25-49 unweighted cases.
    ${ }^{1}$ Friends, family members, and home are not considered a source for condoms.

[^20]:    Note: Table is based on de facto household members who were interviewed and tested. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ HIV positive refers only to those infected with HIV-1.

[^21]:    Note: The table is based on couples for which a valid test result (positive or negative) is available for both partners.
    An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ HIV positive refers only to individuals infected with HIV-1.

[^22]:    ${ }^{1}$ The imputation procedure is based on the assumption that the reported birth ordering of siblings in the history is correct. The first step is to calculate birth dates. For each living sibling with a reported age and each dead sibling with complete information on both age at death and years since death, the birth date was calculated. For a sibling missing these data, a birth date was imputed within the range defined by the birth dates of the bracketing siblings. In the case of living siblings, an age was then calculated from the imputed birth date. In the case of dead siblings, if either the age at death or years since death was reported, that information was combined with the birth date to produce the information missing. If both pieces of information were missing, the distribution of the ages at death for siblings for whom the years since death was unreported, but age at death was reported, was used as a basis for imputing the age at death.

[^23]:    ${ }^{2}$ This time-dependent definition includes all deaths that occurred during pregnancy and two months after pregnancy, even if the death was due to non-maternal causes. However, this definition is unlikely to result in overreporting of maternal deaths because most deaths to women during the two-month period are due to maternal causes, and maternal deaths are more likely to be underreported than overreported.

[^24]:    ${ }^{1}$ Restricted to currently married women. See Table 16.5 for the list of decisions.
    ${ }^{2}$ See Table 16.6.1 for the list of reasons
    ${ }^{3}$ See Table 16.7.1 for the list of reasons

[^25]:    ${ }^{1}$ For child mortality, the rate is based on children alive at age 1 year, not children born alive.

[^26]:    Note: Table is based only on children who usually live in the household. Figures in parentheses are based on 25-49 unweighted cases.
    ${ }^{1}$ Ratio of the percentage with both parents dead to the percentage with both parents alive and living with a parent
    ${ }^{2}$ Ratio of the percentage for OVC to the percentage for non OVC

[^27]:    Note: Table is based only on children who usually live in the household.
    ${ }^{1}$ Shoes, two sets of clothing, and at least one meal per day
    ${ }^{2}$ Ratio of the percentage for OVC to the percentage for non OVC

[^28]:    Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ One or both parents dead
    ${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months

[^29]:    Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that an estimate is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ One or both parents dead
    ${ }^{2}$ Have a very sick parent or live in a household where an adult has been very sick or died in the past 12 months
    FLAS $=$ The Family Life Association of Swaziland
    TSAC $=$ The AIDS Information and Support Centre
    NGO = Non-governmental organisation

[^30]:    na $=$ Not applicable
    ${ }^{1}$ Replace with calendar years in stub. For example, if survey takes place in 2000, 0 becomes 2000, 1 becomes 1999, etc.
    ${ }^{2}$ Both year and month of birth given
    ${ }^{3}(\mathrm{Bm} / \mathrm{Bf}) \times 100$, where Bm and Bf are the numbers of male and female births, respectively
    ${ }^{4}[2 B x /(B x-1+B x+1)] x 100$, where $B x$ is the number of births in calendar year $x$

[^31]:    ${ }^{1}$ Under one month/under one year
    ${ }^{\text {a }}$ Includes deaths under one month reported in days

[^32]:    ${ }^{1}$ The analysis predicted HIV prevalence among the two non-responder groups based on multivariate models of HIV for those who were tested, using a common set of predictor variables. A logistic regression model is used to calculate predicted HIV prevalence separately for the "not-interviewed, not-tested" and "interviewed, not-tested" groups. Predictions for the "not-interviewed, not-tested" group are based on a limited set of variables from the household questionnaire including age, education, wealth index, residence, and geographic region. Predictions for the "interviewed, not-tested" group additionally account for several individual socio-demographic and behavioral characteristics of the respondents, as collected in the survey including marital union, childbirth in last five years (women only), occupation, media exposure, religion, circumcision (men only), STI or STI symptom in last 12 months, cigarette smoking/tobacco use, age at first sex, number of lifetime sex partners, number of sex partners in last 12 months, non-spousal sex in last 12 months, condom use at last sex in last 12 months, paid for sex (for men), participation in household decision-making (women only), number of times slept away in last 12 months (men only), away for more than one month in last 12 months (men only), number of years living in current place of residence, knowledge of HIV prevention methods (ABC), attitude toward people living with HIV/AIDS, woman's ability to negotiate for safer sex, medical injection (women only), alcohol use at last sex in last 12 months, and previously tested for HIV. Analysis for total prevalence used variables that commonly available for both women and men.

